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# COURSES

Courses listed below, separated by subject, are active as of the fall 2023 term. Courses can be updated three times per year, to coincide with the priority enrollment time period for upcoming terms.

## COURSE DESIGNATIONS

Below you will find a short description of items included in course listings and course bubbles. For further information regarding course designations, consult your advisor or view the Requirements for Undergraduate Study (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext>). The mortarboard symbol (#) appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

**Gen Ed** Communication Part A: a course in communication skills at the college level, developing student abilities in writing and public speaking, for both exposition and argumentation.

Communication Part B: a course involving substantial instruction in the four modes of literacy (that is, speaking, reading, writing, and listening), with emphasis on speaking and writing, either in the conventions of specific fields or in more advanced courses in communication.

Quantitative Reasoning Part A: a Quantitative Reasoning Part A course is an introductory course in college#level mathematics, computer science, statistics or formal logic that prepares students for more advanced work in a disciplinary context.

Quantitative Reasoning Part B: a Quantitative Reasoning Part B course builds on the tools of college#level mathematics, computer science, statistics or formal logic that are acquired by achieving the Quantitative Reasoning Part A learning outcomes. Quantitative Reasoning Part B courses may be offered at any level, provided that the material challenges students to think critically and apply quantitative skills to develop models, interpret data, draw conclusions, and solve problems within a disciplinary or interdisciplinary context.

**Ethnic St** Counts toward Ethnic Studies requirement: a course intended to increase understanding of the culture and contributions of persistently marginalized racial or ethnic groups in the United States, and to equip students to respond constructively to issues connected with our pluralistic society and global community.

### Breadth

**Biological Science:** a course concerning the systematic study of the structure, function, growth, origin, evolution, distribution, and taxonomy of living organisms. Courses with this designation may meet Biological Science requirements or the broader Natural Science breadth requirements.

**Humanities:** employing analytical, critical, and interpretive methods, "Arts & Humanities" courses teach a wide array of skills necessary to understand and analyze past, present, and future of the world around us. These courses focus on exploring the human condition, using knowledge to build empathy and appreciation for the complexities of one's own and other people's perspectives.

**Literature:** courses with "literature" designation focus on the reading and interpretation of texts in multiple genres, including fictional and nonfictional prose, poetry, and drama, from a range of cultures, in translation or in their original languages, irrespective of how they are presented. They teach skills of literary analysis while examining the relation between the texts and the cultures, historical periods, and ideas that produced them.

**Natural Science:** a course characterized by the systematic study of the natural and physical world, and with the use of abstraction and logical reasoning. Biological Science and Physical Science courses are subsets of the Natural Science curriculum.

**Physical Science:** a course involving the systematic study of objective information about the physical world, broadly defined, and include areas of study such as Astronomy, Biology, Chemistry, Physics, Materials Science, and Earth Science (atmospheric science, oceanography). Courses with this designation may meet Physical Science requirements or the broader Natural Science breadth requirements.

**Social Science:** a course which relies upon methods of data collection (either qualitative or quantitative), data analysis, or data interpretation that characterize factual, methodological, institutional, and theoretical inquiry into the systematic study of humans/groups and institutions/society.

**Level** Elementary: a course associated with predominantly introductory material, are usually open to all students (including first year students).

Intermediate and Advanced: courses with sensible prerequisites to reflect a gradual mastery of material.

**L&S Credit** Counts as Liberal Arts and Science credit in L&S: a course which encourage students in one or more of the three "habits of the mind" of liberal arts education, as specified by the College of Letters and Science.

Honors	<p>Accelerated Honors (!): a course open to both honors and non-honors students. Accelerated Honors courses receive honors credit automatically in recognition of the amount and rigor of material covered in the course, often designed to combine two semesters of material into one semester. The enrollment system will automatically assign honors.</p> <p>Honors Only Courses (H): a course reserved for students declared in an Honors program only, taught by a faculty member who is an expert in the subject-matter of the course. It is designed to challenge students to actively participate; hence, the course content is often shaped by student questions and interests. The enrollment system will automatically assign honors.</p> <p>Honors Optional (%): a course open to both honors and non-honors students. The optional honors component of work is designed to facilitate in-depth, student-driven learning and enrich the student's experience. The student is responsible for formally declaring their intention to complete an honors project when enrolling.</p>
Grad 50%	Counts toward 50% graduate coursework requirement: a course used in the Graduate School's requirement that least 50% of credits applied toward the student's graduate program must be with courses designed for graduate work.
Work	<p>Workplace Experience Course: a course where workplace experience is linked to learning in an academic program. Courses must include intentional learning objectives related to the experience.</p>
Foreign Language	<p>First-semester language course: Course in a language other than English for students with no prior experience in the language. These courses are not retro-credit eligible.</p> <p>Second-semester language course: Course in a language other than English that requires a Level 1 course a requisite. These courses are retro-credit eligible.</p> <p>Third-semester language course: Course in a language other than English that requires a Level 2 course a requisite. These courses are retro-credit eligible.</p> <p>Fourth-semester language course: Course in a language other than English that requires a Level 3 course a requisite. These courses are retro-credit eligible.</p> <p>Fifth-semester and above language course. Course in a language other than English that requires a Level 4 or Level 5 course a requisite. These courses are retro-credit eligible.</p>

## COURSE REQUISITES

### COURSE REQUISITES

Requisites represent the academic preparation required to be successful in a course. They are enforced via the enrollment system, meaning a student who attempts to enroll in a course but lacks the requisite preparation will be prevented from enrolling in the course until the requisite has been met.

It is assumed that courses in progress at the time of enrollment will be completed successfully and thus fulfill a course requisite. Course administrators/departments may check the completion of these courses

and may drop enrolled students who failed or dropped a requisite course and notify them accordingly.

There are occasions when a student may have the necessary preparation to be successful in a course, but this preparation is not easily identifiable in their student record. An example would be earned transfer credit that did not equate to a UW-Madison course that meets the spirit of the required course. You may ask the course instructor for permission to enroll in a course for which you do not meet the enforced requisite. Instructor permission will override any restrictions on enrollment the class might have.

## WAYS TO FULFILL REQUISITES:

- UW-Madison Courses (p. 5)
- Testing Scores (p. 6)
- Transfer Equivalencies (p. 6)
- General Education (p. 6)
- Limitations on Enrollment/Audience (p. 6)
- Class Standing (p. 7)
- Consent of Instructor (p. 7)

## UW-MADISON COURSES

Courses identified in requisites list the subject(s) and catalog number (example: MATH 221). If a course is cross-listed, you will meet the requisite regardless of the subject you enrolled, with one exception (see minimum credits in a subject) (p. 5). For example, ZOOLOGY/BIOLOGY 101 is the same course, so requisites recognize both Zoology and Biology as fulfilling the requirement; it does not matter which course you enrolled in.

## Concurrent Enrollment

Concurrent enrollment means being enrolled in a course in the same term as the requisite course. There are three ways these can be written:

1. You may either have completed the requisite course in a prior term or be currently enrolled in it. (example: *Course A, or concurrent enrollment*). Example: HORT 335
2. You must be enrolled in the listed courses during the same term, every time the courses are offered (example: *Course A requisite: Concurrent enrollment in Course B.; Course B requisite: Concurrent enrollment in Course A*). You will have to enroll in all courses at the same time otherwise you will not meet the requisite. Example: NURSING 726 & NURSING 728
3. One course requires concurrent enrollment but the other course does not. For example, if you enroll in a Course A with a requisite stating "*Concurrent enrollment in Course B*", but Course B does not require you to be enrolled in Course A. In this situation, you must enroll in Course B first, then go back in and enroll in Course A. Example: MUS PERF 201 & MUS PERF 251

## Minimum Credits in a Subject

Requisites may specify a certain number of credits in any given subject (example: *3 credits in HISTORY*). This means you must have taken at least 3 credits in the HISTORY course array without specifying an individual course. If you take a course cross-listed

with HISTORY, but do not enroll in HISTORY, you will not meet the requisite. Example: HISTORY 200

## Grades

In very limited situations, a minimum grade may be included associated with a requisite course (example: a *grade of C in Course A*). If you are a transfer student, you may need individual permission from the instructor to enroll in courses with this type of requisite. Example: NUTR SCI 431

## TESTING SCORES

### Advanced Placement (AP), International Baccalaureate (IB), and the College-Level Examination Program (CLEP)

These exam scores are converted into UW-Madison credit via equivalent courses. They do not display publicly in requisites. Due to the nature of the vast array of subject material there isn't always a direct equivalent (exact match from the exam to a UW-Madison course), thus credit will show up on your record as a transfer equivalent (denoted by SUBJECT X##, example GEN ELCT X12). See the list of exams and their equivalent UW-Madison courses in the Placement and Credit by Exam (<http://guide.wisc.edu/undergraduate/#placementandcreditbyexamtext>) section of Guide.

### UW-System/UW-Madison Placement Exam Scores and Departmental Placement Exams

The UW-System and UW-Madison provide placement exams in English, English as a Second Language (ESL), French, German, Math, Spanish and have direct equivalents to UW-Madison courses. Departments may also provide placement exams in other subject matter where a student may have acquired knowledge, skills, or competencies. Requisites use placement exam scores and use the language "*or placement into [course]*." Find more information about these exams and subsequent placement into UW-Madison courses in the Placement and Credit by Exam (<http://guide.wisc.edu/undergraduate/#placementandcreditbyexamtext>) section of Guide. Example: FRENCH 102

## TRANSFER EQUIVALENCIES

If you are transferring to UW-Madison, their previous coursework will be converted to UW-Madison credit/courses. In most cases, you will see the equivalent UW-Madison course on your transcript, which can be used just like the courses above (p. 5). If there is not a direct equivalent (exact match from your previous institution to a UW-Madison course), you will receive credit in any given subject as a transfer equivalent (denoted by SUBJECT X##, example GEN ELCT X12).

In some situations, you may have acquired subject matter knowledge, but did not complete all the learning outcomes associated with UW-Madison general education attributes or designations. Transfer equivalency courses used in this situation provide a transfer credit equivalent to course content without the general education requirement fulfillment. These are included in requisites behind the scenes.

When requisites include a minimum letter grade, the transfer equivalency grade will factor in the requisite as a 2.000 GPA, regardless your grade from the previous institution.

### List of standard UW-Madison equivalencies without general education attributes/designations

- **BIO SCI X52:** Included in requisites where BIOLOGY/BOTANY/ZOOLOGY 152 is used. This is the transfer equivalency for the bioscience content without fulfilling the Communications B requirement.
- **PSYCH X02:** Include in requisites where PSYCH 225 is used. This is the transfer equivalency without fulfilling the Communications B requirement.

## GENERAL EDUCATION

Some courses utilize the satisfaction of a specific general education requirement as a requisite. These are written as:

- *Satisfied Communications A requirement*
  - Example: COM ARTS 262
- *Satisfied Quantitative Reasoning (QR) A requirement*
  - Example: C&E SOC/SOC 360
- *Satisfied Quantitative Reasoning (QR) B requirement*

To see more about general education requirements, see the Requirements for Undergraduate Degrees (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduatetext>) in Guide.

## LIMITATIONS ON ENROLLMENT/AUDIENCE

Some courses are designed for a specific audience. Requisites limit who can enroll in these courses.

### Significant content overlap

When a course covers a significant portion of another course, a requisite will prevent you from earning credit in courses that are vastly similar. These requisites include statements such as "*Not open to students with credit in [Course A]*", which will prevent you from enrolling in a course where you already have mastered the subject matter. Example: CHEM 327

### Honors

Courses may limit enrollment to students only in honors programs. Requisites for these courses will be written as:

- *Declared in an honors program* (this means any honors in the major, college honors, or honors research) Example: POLI SCI 182
- *Declared in [school or college] honors program* (this means any honors program within a specific school or college) Example: INTER-AG 288
- *Declared in [degree/major/program] honors in the major* (this means to a single, specific honors program)

### Limiting by program

Courses can be designed for specific programs and will have requisites that specify who can enroll. You must be declared in one of these programs to enroll. Requisites will be written as:

- *Declared in [degree/major/program]* Example: KINES 300
- *Declared in [major/program] graduate program* Example: CHEM/BIOCHEM 704
- *Declared in Capstone Certificate in [program]* Example: M E 718
- *Classified as Pre-[degree/major/program name]* Example: CURRIC 319

## CLASS STANDING

Class standing is based on the number of credits you have earned, credits in progress at time of enrollment, and your academic career (undergraduate, graduate, pharmacy, medical, veterinary, law, or special).

Requisites using standing can be written in a variety of ways, depending on the audience. If the requisite is *Sophomore standing*, this includes sophomore, junior, senior, graduate/professional, or special career students. If the requisite is *Sophomore standing only*, only undergraduate students with 24-53 credits may enroll in the course.

### Credits and Class Standing

- 0-23 credits: Freshman
- 24-53 credits: Sophomore
- 54-85 credits: Junior
- 86+ credits: Senior

### Limits based on course catalog number

- Courses numbered 100-299 are open to undergraduates only. Graduate students may enroll, but the credits will not be reflected on their student record.
- Courses numbered 300-699 are open to undergraduate and graduate programs.
- Courses numbered 700 and above are open only to graduate/professional students.

## CONSENT OF INSTRUCTOR

Some courses may only enroll when you have consent of instructor. These courses usually are independent study, directed study, etc. or courses that require auditions, permission the first time, or other unique situations that are subjective. This is written as "Consent of Instructor." Example: DANCE 159

## SYLLABUS

## OVERVIEW

The following statements were created for inclusion in course syllabi. Instructors are strongly encouraged to reference, or include a link to, these statements in their individual course syllabi. This ensures that consistent institutional information is provided to all students.

## SYLLABUS STATEMENTS

### ACADEMIC CALENDAR & RELIGIOUS OBSERVANCES

Academic Calendar & Religious Observances (<https://secfac.wisc.edu/academic-calendar/>)

Establishment of the academic calendar for the University of Wisconsin-Madison falls within the authority of the faculty as set forth in Faculty Policies and Procedures ([https://policy.wisc.edu/library/UW-801/#Pol801\\_1\\_20](https://policy.wisc.edu/library/UW-801/#Pol801_1_20)). Construction of the academic calendar is subject to various rules and laws prescribed by the Board of Regents, the Faculty Senate, State of Wisconsin and the federal government. For additional dates and deadlines for students, see the Office of the Registrar's pages (<https://registrar.wisc.edu/dates/>). Students are responsible for notifying instructors within the first two weeks of classes about any need for

flexibility due to religious observances (<https://policy.wisc.edu/library/UW-880/>).

## ACADEMIC INTEGRITY STATEMENT

By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary sanctions (<https://conduct.students.wisc.edu/academic-misconduct/>) include, but are not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion.

## ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (UW-855) (<https://policy.wisc.edu/library/UW-855/>) require the university to provide reasonable accommodations to students with disabilities to access and participate in its academic programs and educational services. Faculty and students share responsibility in the accommodation process. Students are expected to inform faculty of their need for instructional accommodations during the beginning of the semester, or as soon as possible after being approved for accommodations. Faculty will work either directly with the student or in coordination with the McBurney Center to provide reasonable instructional and course-related accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA. (See: McBurney Disability Resource Center (<https://mcburney.wisc.edu/>))

## COURSE EVALUATIONS

Students will be provided with an opportunity to evaluate their enrolled courses and their learning experience. Most instructors use AEFIS a digital course evaluation (<https://kb.wisc.edu/luwmad/81069/>) survey tool. In most instances, students receive an official email two weeks prior to the end of the semester, notifying them that anonymous course evaluations are available. Student participation is an integral component of course development, and confidential feedback is important. UW-Madison strongly encourages student participation in course evaluations.

## DIVERSITY & INCLUSION STATEMENT

Diversity (<https://diversity.wisc.edu>) is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.

## MENTAL HEALTH AND WELL-BEING STATEMENT

Students often experience stressors that can impact both their academic experience and personal well-being. These may include mental health concerns, substance misuse, sexual or relationship violence, family circumstances, campus climate, financial matters, among others.

Students are encouraged to learn about and utilize UW-Madison's mental health services and/or other resources as needed. Visit [uhs.wisc.edu](https://uhs.wisc.edu) or call University Health Services at (608) 265-5600 to learn more.

### Privacy of Student Records & the Use of Audio Recorded Lectures Statement

View more information about FERPA (<https://registrar.wisc.edu/ferpa-facstaff/>).

Lecture materials and recordings for this course are protected intellectual property at UW-Madison. Students in courses may use the materials and recordings for their personal use related to participation in class. Students may also take notes solely for their personal use. If a lecture is not already recorded, students are not authorized to record lectures without permission unless they are considered by the university to be a qualified student with a disability who has an approved accommodation that includes recording. [Regent Policy Document 4-1] Students may not copy or have lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities, with the exception of sharing copies of personal notes as a notetaker through the McBurney Disability Resource Center. Students are otherwise prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.

### STUDENTS' RULES, RIGHTS & RESPONSIBILITIES

Rights & Responsibilities (<https://guide.wisc.edu/undergraduate/#rulesrightsandresponsibilitiestext>)

### TEACHING & LEARNING DATA TRANSPARENCY STATEMENT

The privacy and security of faculty, staff and students' personal information is a top priority for UW-Madison. The university carefully reviews and vets all campus-supported digital tools used to support teaching and learning, to help support success through learning analytics (<https://teachlearn.provost.wisc.edu/learning-analytics/>), and to enable proctoring capabilities. View the university's full teaching and learning data transparency statement (<https://teachlearn.provost.wisc.edu/teaching-and-learning-data-transparency-statement/>).

## ACCOUNTING AND INFORMATION SYSTEMS (ACCT I S)

### ACCT I S 100 – INTRODUCTORY FINANCIAL ACCOUNTING

3 credits.

Examines generally accepted accounting principles for measurement and reporting of financial information in a balance sheet, income statement, and statement of cash flows; introduction to analysis and interpretation of financial accounting data for decision-making purposes.

**Requisites:** Not open to students with credit for ACCT I S 300

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ACCT I S 211 – INTRODUCTORY MANAGERIAL ACCOUNTING

3 credits.

Managerial accounting concepts relevant for decision-making; use of accounting information for planning, decision-making, and control of business operations in various management and business environments.

**Requisites:** ACCT I S 100 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ACCT I S 300 – ACCOUNTING PRINCIPLES

3 credits.

Examines both financial and managerial accounting for business decisions. Emphasizes preparation and interpretation of financial statements, analysis of financial information, determination of costs for products and services, and use of accounting information for planning and control of business operations.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ACCT I S 100.

**Course Designation:** Gen Ed – Quantitative Reasoning Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ACCT I S 301 – FINANCIAL REPORTING I

3 credits.

Examines current and emerging financial accounting theory and techniques used to measure and report financial information to investors, creditors, and other external users. Emphasizes asset and income determination, preparation and interpretation of financial statements, and related disclosure requirements.

**Requisites:** ACCT I S 100 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ACCT I S 302 – FINANCIAL REPORTING II**

3 credits.

Examines current and emerging financial accounting theory and techniques used to measure and report financial information to investors, creditors, and other external users, including dilutive securities, investments, revenue recognition, income tax allocation, pensions, leases and accounting changes.

**Requisites:** ACCT I S 301 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 310 – COST MANAGEMENT SYSTEMS**

3 credits.

Design of actual and standard cost systems for reporting product costs in job costing, process costing, and activity costing production environments. Overhead allocation methods. Budgeting and profit planning procedures. Techniques for variance analysis and performance evaluation. Behavioral considerations in the design and use of cost accounting information systems.

**Requisites:** ACCT I S 211 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S/LAW 329 – TAXATION: CONCEPTS FOR BUSINESS AND PERSONAL PLANNING**

3 credits.

An introduction to the U.S. income taxation concepts with emphasis on business and personal planning strategies. Taxes are placed in a framework which considers all costs of doing business. Includes approaches and skills needed to prepare individual, corporate, and partnership income tax returns.

**Requisites:** ACCT I S 100, 300, or LAW 811. Not open to students declared in Business: Accounting BBA program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 340 – ACCOUNTING INFORMATION SYSTEMS**

3 credits.

Understand, document, and evaluate integrated enterprise systems and critical information tracked in core business processes, applying technology to model, capture, and query data needed, and assess system design and controls.

**Requisites:** ACCT I S 211 and (ACCT I S 301 or concurrent enrollment); or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACCT I S 399 – READING AND RESEARCH-ACCOUNTING**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2015

**ACCT I S 406 – ACCOUNTING AND ANALYSIS FOR REPORTING ENTITIES**

3 credits.

Theoretical, procedural, and practical issues associated with the preparation of financial statements of alternative reporting entities, including the accounting for mergers and acquisitions, consolidations, foreign operations, and complex financial instruments.

**Requisites:** ACCT I S 302, 702, declared in Business: Accounting and Business Analysis MSB, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 600 – PROFESSIONAL EXPERIENCE IN ACCOUNTING**

1-6 credits.

An opportunity to experience a professional accounting practice first hand and to integrate this experience with the curriculum.

**Requisites:** None

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 601 – PROFESSIONAL PRACTICE ISSUES IN ACCOUNTING, AUDITING, AND TAXATION**

3 credits.

Study of current accounting and audit issues within a case context. Students will be required to perform computerized research, analyze topical accounting and audit issues, and make case presentations.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 603 – FINANCIAL STATEMENT ANALYSIS**

3 credits.

Analysis and interpretation of financial statements, including profitability and ratio analysis, cash flow analysis, accounting-based equity valuation, market impact of accounting choices, earnings quality, earnings management, mergers and acquisitions, intangibles, accounting-based trading strategies, accounting and credit ratings, and international accounting.

**Requisites:** ACCT I S 302 or 702

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACCT I S 620 – FUNDAMENTALS OF TAXATION**

3 credits.

Application of federal tax provisions and administrative rules common to most taxpayers with introductions to rules specific to corporations, pass-through entities, and individuals.

**Requisites:** ACCT I S 301 or concurrent enrollment or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ACCT I S 621 – CORPORATE AND ADVANCED TAXATION**

3 credits.

Application of federal tax provisions and administrative rules pertaining to corporations and shareholders, including elective provisions for "S" corporations. Emphasis on tax planning and the consequences of corporate and shareholder decisions.

**Requisites:** ACCT I S 620, declared in Business: Accounting and Business Analysis MSB, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 630 – FOUNDATIONS OF AUDITING**

3 credits.

Audit and assurance services are vital to ensuring that organizations, their stakeholders, and the public can rely on organizations' financial information. Focus is on financial statement audits and their role in corporate governance and oversight. Emphasizes the components of the audit process with application to key financial accounting cycles and related internal controls. Also covers the professional role of public accountants and professional standards, norms and ethics.

**Requisites:** ACCT I S 301, 701, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 640 – FOUNDATION IN ACCOUNTING ANALYTICS**

3 credits.

Analytics has become an integral part of accounting to support decision making, coordination and control, and compliance with regulations. Being able to identify and pursue relevant questions using data is a critical skill for new hires, as is the ability to successfully communicate one's findings. This pursuit and communication requires a strong facility with a variety of analytics technologies.

**Requisites:** (ACCT I S 340 or concurrent enrollment), (ACCT I S 100 and GEN BUS 307), (ACCT I S 700 or concurrent enrollment), or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 700 – FINANCIAL ACCOUNTING**

2-3 credits.

Measurement and reporting guidelines underlying preparation of general purpose financial statements. Explore current measurement and reporting issues. Analyze and interpret financial statement data for investment, lending, and related decisions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACCT I S 701 – FINANCIAL REPORTING I**

3 credits.

Examines current and emerging financial accounting theory and techniques used to measure and report financial information to investors, creditors, and other external users. Emphasizes asset and liability valuations and their relationships to income determination, preparation and interpretation of financial statements, and related disclosure requirements.

**Requisites:** ACCT I S 700

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 702 – FINANCIAL REPORTING II**

3 credits.

Examines current and emerging financial accounting theory and techniques used to measure and report financial information to investors, creditors, and other external users, including dilutive securities, investments, revenue recognition, income tax allocation, pensions, leases and accounting changes.

**Requisites:** ACCT I S 701

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 706 – ADVANCED FINANCIAL REPORTING**

3 credits.

Accounting principles related to formation, maintenance, expansion, contraction and liquidation of the business enterprise.

**Requisites:** ACCT I S 701

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 710 – MANAGERIAL ACCOUNTING**

2-3 credits.

Interpretation and use of accounting data for management planning, decision making and control. Consideration of cost-volume-profit relationships, relevant costs, variable (direct) costing, activity-based costing, transfer pricing and performance evaluation of segments of the firm.

**Requisites:** ACCT I S 700

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACCT I S 711 – STRATEGIC COST MANAGEMENT**

2 credits.

Development and analysis of cost and other performance measurement information for managerial planning, control, and decision-making. Integration of information needs for various managerial functions.

**Requisites:** ACCT I S 700**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2017**ACCT I S 722 – ANALYSIS OF TAXATION FOR PASS-THROUGH ENTITIES**

3 credits.

Analysis of federal tax provisions and administrative rules regarding pass-through entities, such as partnerships, S-corporations, and limited liability companies; including their application to entity formation and operation, property and ownership basis, distributions, and interest transfers.

**Requisites:** ACCT I S 620 and graduate/professional standing, declared in Business: Accounting and Business Analysis MSB, or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ACCT I S 724 – TAX RESEARCH, PROCEDURE & ANALYSIS**

3 credits.

Methodologies and tools for tax research; utilization of tax research tools; preparation of investigative reports; professional and interprofessional responsibilities; administrative procedures and techniques.

**Requisites:** Graduate/professional standing and (ACCT I S 620 or LAW 742), declared in Business: Accounting and Business Analysis MSB, or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ACCT I S 725 – ANALYSIS OF INTERNATIONAL TAXATION**

3 credits.

An introduction to international tax issues. Topics covered may include tax treaties, foreign tax credit provisions, Subpart F rules, and taxation of inbound investment and business income.

**Requisites:** Graduate/professional standing and (ACCT I S 620 or LAW 742), declared in Business: Accounting and Business Analysis MSB, or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ACCT I S 726 – ADVANCED CORPORATE TAXATION**

3 credits.

The application of federal tax law to a variety of complex corporate tax topics and analysis on corporations and their shareholders. Primary legal sources of the code, regulations, and case law are applied to determine the tax treatment for advanced topics such as: 1) Tax and non-tax factors considered by buyers and sellers in both stock and asset acquisitions, 2) Taxable asset acquisitions, 3) Consolidations, 4) Divestitures and divisive D reorganizations, and 5) Codification of the economic substance doctrine. The emphasis of the class is on tax planning and the consequences of corporate and shareholder decisions.

**Requisites:** ACCT I S 620 and 621**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ACCT I S 730 – ADVANCED AUDITING: ANALYSIS, POLICY, AND JUDGMENT**

3 credits.

Auditors increasingly use analytics to provide assurance over financial and non-financial information. Audit and assurance principles will be viewed through the lens of an analytics mindset. Uses analytics in combination with other audit techniques as a basis for professional judgments. Examines how the contemporary audit environment influences professional judgments. Develops the technical knowledge and skills needed in many professional roles through discussion, case studies, and group projects.

**Requisites:** (Graduate/professional standing, ACCT I S 340, and 630), declared in Business: Accounting and Business Analysis MSB, or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ACCT I S 740 – INFORMATION RISK, CONTROL, & FORENSICS**

3 credits.

Examines the control and security of accounting information systems with an auditing and forensic perspective. Topics covered include: data governance frameworks, risks to information (i.e., data), internal controls related to identified risks, types of assurance services, computer assisted audit tools and techniques (CAATs), fraud, and other related topics.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ACCT I S 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ACCT I S 770 – ACCOUNTING THEORY: REPORTING INCENTIVES AND CONSEQUENCES**

3 credits.

Review and analysis of theoretical foundations of corporate financial reporting; application of conceptual framework and finance/economic theories to understand development of major accounting standards.

**Requisites:** Graduate/professional standing and (ACCT I S 302 or 702); or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACCT I S 771 – ANALYSIS OF PERFORMANCE MEASUREMENT & CONTROL**

3 credits.

Development and analysis of accounting data for managerial planning, control, decision-making, and costing, with a focus on the integration of financial and non-financial information needs for various managerial functions.

**Requisites:** Graduate/professional standing and (ACCT I S 310 or 710), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S 772 – ANALYSIS OF TAXES & BUSINESS DECISIONS**

3 credits.

Readings and cases in taxation; analysis and integration of related tax provisions and taxpayer impact.

**Requisites:** ACCT I S 620 and graduate/professional standing, declared in Business: Accounting and Business Analysis MSB, or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACCT I S/E P D/GEN BUS 781 – FINANCIAL AND BUSINESS ACUMEN**

1 credit.

This course is designed with a keen awareness for the needs of the non-financial student or professional. For this class, no previous financial training is required. The intent is to equip you with the essential concepts used to develop financial literacy. Content will cover basic financial terms and reports, analytical tools to help interpret financial data and using financial data in budgets and forecasts.

**Requisites:** Graduate/professional standing. Not open to students declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ACCT I S 799 – READING AND RESEARCH-ACCOUNTING**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and the intercession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2009

**ACCT I S 971 – SEMINAR IN ACCOUNTING RESEARCH**

3 credits.

Methods of inquiry and research methodology in accounting. Analysis of current research, with the emphasis on empirical research in accounting.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ACCT I S 990 – ACCOUNTING INDEPENDENT RESEARCH PHD THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ACCT I S 999 – READING AND RESEARCH-ACCOUNTING PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged with a faculty member.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# ACTUARIAL SCIENCE (ACT SCI)

## ACT SCI 300 – ACTUARIAL SCIENCE METHODS I

1 credit.

Develop a knowledge of fundamental mathematical tools for quantitatively assessing risk. Emphasize the applications of these tools to problems encountered in actuarial science.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, or MATH/STAT/MATH 431), declared in Capstone Certificate in Actuarial Science, or declared in undergraduate Business Exchange program. Not open to graduate students.

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

## ACT SCI 301 – ACTUARIAL SCIENCE METHODS II

1 credit.

Develop a knowledge of mathematical tools for quantitatively assessing financial risk. Emphasize the applications to problems encountered in actuarial science.

**Requisites:** (ACT SCI/MATH 303 or concurrent enrollment), declared in Capstone Certificate in Actuarial Science, or declared in undergraduate Business Exchange program. Not open to graduate students.

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

## ACT SCI 303 – THEORY OF INTEREST

3 credits.

Time value of money; interest compounded discretely and continuously; accumulated and present value of payments; loans and sinking funds; annuity and bond valuation; interest rate term structure; duration, immunization and interest rate swaps.

**Requisites:** MATH 222, 276, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ACT SCI 365 – CONTEMPORARY TOPICS

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## ACT SCI 399 – READING AND RESEARCH-ACTUARIAL SCIENCE

1-3 credits.

Directed study in various areas of actuarial science that provides the opportunity to participate in more in-depth study (intermediate level) under the direct guidance of actuarial science faculty.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 4 number of completions

**Last Taught:** Fall 2022

## ACT SCI 650 – ACTUARIAL MATHEMATICS I

3 credits.

Advanced problems in the mathematical theory of life contingencies; force of mortality, laws of mortality; premiums and reserves for insurance and annuities based on a single life.

**Requisites:** ACT SCI/MATH 303 and (MATH/STAT/MATH 309, STAT 311, or MATH/STAT/MATH 431), or declared in undergraduate Business Exchange program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ACT SCI 651 – ACTUARIAL MATHEMATICS II

3 credits.

Continuation of ACT SCI 650. Joint life probabilities, annuities and insurances; multiple-decrement theory; pension fund mathematics.

**Requisites:** ACT SCI 650

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ACT SCI 652 – LOSS MODELS I

3 credits.

Definition and selection of probability distributions appropriate for insurance data that are heavily tailed and skewed.

**Requisites:** (MATH/STAT/MATH 310 or STAT 312 or concurrent enrollment) or declared in undergraduate Business Exchange program

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ACT SCI 653 – LOSS MODELS II

3 credits.

Estimation of parameters of probability distributions appropriate for insurance data that are heavy tailed and skewed; assessment of credibility of data for ratemaking.

**Requisites:** ACT SCI 652 or declared in undergraduate Business Exchange program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ACT SCI 654 – REGRESSION AND TIME SERIES FOR ACTUARIES

2-3 credits.

Linear regression and correlation; generalized linear regression models; introduction to time series; time series model building and forecasting with focus on data of interest to actuaries.

**Requisites:** Junior standing and (GEN BUS 306, 704, MATH/STAT/MATH 310, or STAT 312), or declared in the Business Exchange program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ACT SCI 655 – HEALTH ANALYTICS**

2-3 credits.

Provides an introduction to the broad area of health, integrating how researchers from multiple perspectives have investigated various aspects of health, along with the hands-on practice of learning and using statistical tools to analyze these topics.

**Requisites:** Junior standing and (GEN BUS 306, 704, MATH/STAT/ MATH 310, or STAT 312), or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACT SCI 657 – RISK ANALYTICS**

2-3 credits.

Develops a toolbox for modeling, communicating, and managing risk and uncertainty in predictive models. Topics include time-series forecasting, probabilistic forecasting techniques, scenario analysis, and integrations of modern machine learning methods with distribution-based predictive models, among others. Particularly addresses situations where data is sparse, including climate, cyber, and catastrophic risk.

**Requisites:** ACT SCI 654, 655, or GEN BUS 656

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ACT SCI 765 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

## AFRICAN CULTURAL STUDIES (AFRICAN)

**AFRICAN 100 – INTRODUCTION TO AFRICAN CULTURAL EXPRESSION**

3 credits.

An introduction to current research in African cultural studies, ranging from various literary genres and uses of discourse; to diverse media including screen media, music, cartoons, and journalism; and to other forms of popular expression like soccer and drama. Through an introduction to these forms, study the diverse methods used by scholars in this field, such as textual analysis, film criticism, ethnomusicology, discourse analysis, and ethnography; and to the cultural diversity of Africa and its diasporic cultures.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN/HISTORY 129 – AFRICA ON THE GLOBAL STAGE**

3-4 credits.

Explores the interplay between Africa and the World from the 19th century to the present, covering subjects such as the slave- trade, repatriation, Africanizing of culture in the Americas and Europe, the spread and revival of world religions, colonialism, global capitalism, the rise of global popular culture such as pop music and video films, environmental concerns and global epidemics.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**AFRICAN 201 – INTRODUCTION TO AFRICAN LITERATURE**

3 credits.

Survey of African literary traditions and introduction to literary analysis.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B Breadth - Literature. Counts toward the Humanities req Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 202 – INTRODUCTORY TOPICS IN AFRICAN CULTURAL STUDIES**

3 credits.

Various topics in African cultural studies and African expressive cultures. Topics will include cultural and/or political themes that cut across multiple media and genres, including two or more of the following: literature, film, media, music, performance, language use, etc.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRICAN 203 – INTRODUCTORY TOPICS IN AFRICAN LITERATURE**

3 credits.

Introduction to a special topic in African literature, focused on a specific region or genre.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **AFRICAN 204 – INTRODUCTORY TOPICS IN AFRICAN LANGUAGES**

3 credits.

Special topics related to African languages and/or linguistics at the introductory level. Introduction to the diversity of African languages, superdiverse multilingual African societies, and the relationships between language and other societal issues.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **AFRICAN/FOLKLORE 210 – THE AFRICAN STORYTELLER**

3 credits.

The oral tradition and the written word; the composition of stories, relationship between performer and audience, and transmission of tradition in various African societies.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **AFRICAN 212 – INTRODUCTION TO AFRICAN POPULAR CULTURE**

3 credits.

Popular culture (such as popular literature, music, television, news media, movies, etc.) will be used to introduce the African continent and its cultures, people, and languages. Explore text from a different regions on the continent, with a focus on differences and similarities across the continent at the level of aesthetics and context.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **AFRICAN/FRENCH 216 – MODERN AND CONTEMPORARY FRANCOPHONE TOPICS**

3 credits.

Modern and contemporary topics in the African francophone world, which includes both the African continent and the African diaspora. Taught in English.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

### **AFRICAN/AFROAMER 220 – HIPHOP, YOUTH CULTURE, AND POLITICS IN SENEGAL**

3 credits.

Explores how HipHop, a quintessential manifestation of African American culture, is adopted and adapted by African youth to fight for social justice and democracy in their local contexts, while at the same time constructing a diasporic African sensibility and "cultural citizenship" that transcends borders and oceans. Beginning with the history, culture, and politics of HipHop in the U.S., we compare and contrast HipHop's development in Africa with specific attention to Senegal. Explores the the youth culture and politics in Senegal and the ongoing process of cross-cultural flows and hybridity.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **AFRICAN 230 – INTRODUCTION TO YORUBA LIFE AND CULTURE**

3 credits.

Introduction to some aspects of the life and culture of Yoruba-speaking people of West Africa, Cuba, Brazil, and Haiti, including the importance of Yoruba culture in the Americas.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **AFRICAN 231 – INTRODUCTION TO ARABIC LITERARY CULTURE**

3 credits.

Overview on Arabic cultural production. Develops a historic and critical understanding of Arabic literary traditions, as well as related musical and visual arts, up to the twenty-first century.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **AFRICAN 232 – INTRODUCTION TO SWAHILI CULTURES**

3 credits.

A multi-disciplinary introduction to the identities, history, language, literature, and artistic heritage of Swahili speakers.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015



**AFRICAN/AFROAMER 233 – GLOBAL HIPHOP AND SOCIAL JUSTICE**

3 credits.

Critical interrogation of the relationship between HipHop and social justice. What is "HipHop," what is "social justice," what is their relationship, how can HipHop be an effective force for social justice, and what obstacles mitigate against this potential? Discussions will develop familiarity with important concepts in Black studies and social theory such as race and colonialism, imperialism and hegemony, structure and agency, identity and strategic essentialism. Consider the race/class/gender dimensions of weekly topics, acquire a broader familiarity with HipHop activism, and develop new conceptual tools and critical thinking skills.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFRICAN/FOLKLORE 270 – THE HERO AND TRICKSTER IN AFRICAN ORAL TRADITIONS**

3 credits.

Two major characters in African oral tradition as treated in narrative, epic and heroic poetry.

**Requisites:** 3 credits in AFRICAN**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**AFRICAN 275 – LEAD WITH LANGUAGES: PUTTING LANGUAGE SKILLS TO WORK**

1 credit.

Whether you developed your language abilities at home, abroad, or in an educational setting, learn how to leverage your language skills to maximize potential employment opportunities. Develop an understanding of transferable skills unique to language learners and work toward articulating these skills for resume, cover letter, networking, and interviewing exercises. Connect your enthusiasm for learning languages with your personal interests, skills, and abilities to begin exploring career pathways. Learn from peers, alumni, and other guest speakers with language majors and multilingual backgrounds who have succeeded in a variety of careers.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/POLI SCI/ SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFRICAN/AFROAMER/HISTORY/POLI SCI 297 – AFRICAN AND AFRICAN-AMERICAN LINKAGES: AN INTRODUCTION**

4 credits.

Analysis of retention of African elements in African-American oral, written, and material culture. Social, cultural, and political issues regarding race, self-definition, and self-determination in both Africa and North America will be examined.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**AFRICAN 300 – AFRICAN LITERATURE IN TRANSLATION**

3 credits.

Introduction to the literature, oral or written, of a coherent cultural area of Africa, for those for whom texts in the original language are not accessible.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**AFRICAN/INTL ST 302 – ARABIC LITERATURE AND CINEMA**

3 credits.

An introduction to the most significant topics of contemporary Arabic literature and cinema. Discuss the legacy of colonialism, repressive nature of post-independence regimes, discourses on nationalism, religion vs. secularization, gender relations, representation of cultural otherness, and the Arab Springs. Materials will be drawn from a variety of cultural forms including literature, film, music, and performance; and scholarship, exploring the social, cultural, political, and economic contexts in which texts and films are written and exhibited.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**AFRICAN 303 – AFRICAN LITERATURE AND VISUAL CULTURE**

3 credits.

An introduction to literature and visual culture of Africa in various periods and places; specific topics will vary.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**AFRICAN 304 – SOCCER IN AFRICA**

3 credits.

Examines representations of soccer in sub-Saharan Africa. It is meant to make us think about African soccer as a cultural and political practice, while keeping in mind that this is a sport or a game. What does this sport, "the beautiful game" as it is called, the most widely followed and adored game, mean to Africans? What is the role of fans and spectators, alongside readers of literature and viewers of film? How does soccer link Africa to the rest of the world? Briefly cover the history of the game, in the world and in Africa, and its social impact; learn about both magic and racism in African soccer; read novels, discuss paintings, and watch films that represent soccer in meaningful ways and connect it to important issues of the neocolonial world.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**AFRICAN 321 – FIRST SEMESTER ARABIC**

5 credits.

For beginning learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 322 – SECOND SEMESTER ARABIC**

5 credits.

For beginning learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 321 or 339

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 323 – THIRD SEMESTER ARABIC**

4 credits.

For intermediate learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 322 or 340

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 324 – FOURTH SEMESTER ARABIC**

4 credits.

For intermediate learners of Modern Standard Arabic. Emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 323 or 341

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 325 – COLLOQUIAL ARABIC**

2 credits.

For intermediate learners of colloquial Arabic from specific region of Arab nations; emphasis on proficiency through speaking, listening, writing and on communication in cultural context.

**Requisites:** AFRICAN 322 or 340

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**AFRICAN 326 – COLLOQUIAL ARABIC**

2 credits.

For advanced learners of colloquial Arabic from specific region of Arab nations; emphasis on proficiency through speaking, listening, reading, writing and on communication in cultural context.

**Requisites:** AFRICAN 324, 325, or 342

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**AFRICAN 329 – FIFTH SEMESTER ARABIC**

3 credits.

For advanced learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 324 or 342

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 330 – SIXTH SEMESTER ARABIC**

3 credits.

For advanced learners of Modern Standard Arabic; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 329 or 343

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 331 – FIRST SEMESTER SWAHILI**

5 credits.

For beginning learners of Standard Swahili; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 332 – SECOND SEMESTER SWAHILI**

5 credits.

For beginning learners of Swahili; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 331

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 333 – THIRD SEMESTER SWAHILI**

4 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** AFRICAN 332

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 334 – FOURTH SEMESTER SWAHILI**

4 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** AFRICAN 333

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 335 – FIRST SEMESTER-A LANGUAGE OF SOUTHERN AFRICA**

5 credits.

For beginning learners of a Southern African language; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**AFRICAN 336 – SECOND SEMESTER-A LANGUAGE OF SOUTHERN AFRICA**

4-5 credits.

For beginning learners of a Southern African language; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 335

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRICAN 337 – THIRD SEMESTER-A LANGUAGE OF SOUTHERN AFRICA**

4 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** AFRICAN 336

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**AFRICAN 338 – FOURTH SEMESTER-A LANGUAGE OF SOUTHERN AFRICA**

4 credits.

Advanced speaking knowledge and grammatical analysis. Structure, reading, drills.

**Requisites:** AFRICAN 337

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**AFRICAN 339 – FIRST SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, reading and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 340 – SECOND SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, ready and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute and (AFRICAN 339 or 321)

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 341 – THIRD SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute and (AFRICAN 340 or 322)

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 342 – FOURTH SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute and (AFRICAN 341 or 323)

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 343 – FIFTH SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute and (AFRICAN 342 or 324)

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 344 – SIXTH SEMESTER SUMMER ARABIC**

4 credits.

Emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** Declared in Arabic, Persian, and Turkish Language Institute and (AFRICAN 343 or 329)

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AFRICAN 361 – FIRST SEMESTER HAUSA**

5 credits.

For beginning learners of Hausa; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**AFRICAN 362 – SECOND SEMESTER HAUSA**

4-5 credits.

For beginning learners of Hausa; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 361

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**AFRICAN/ASIAN/RELIG ST 370 – ISLAM: RELIGION AND CULTURE**

3-4 credits.

The emergence and development of Islam; schism; theology; asceticism; speculative and popular mysticism; literatures in diverse Islamic languages. Not open to students with credit for LCA 370 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**AFRICAN 371 – FIRST SEMESTER YORUBA**

5 credits.

For beginning learners of Standard Yoruba; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 372 – SECOND SEMESTER YORUBA**

5 credits.

For beginning learners of standard Yoruba; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 371

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 373 – THIRD SEMESTER YORUBA**

4 credits.

Advanced grammar and conversational practice. Reading contemporary Yoruba literature and other writings.

**Requisites:** AFRICAN 372

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFRICAN 374 – FOURTH SEMESTER YORUBA**

4 credits.

Continue to develop and refine competence and performance in linguistic skills.

**Requisites:** AFRICAN 373

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 391 – FIRST SEMESTER-A LANGUAGE OF WEST AFRICA**

5 credits.

For beginning learners of a West African language; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**AFRICAN 392 – SECOND SEMESTER-A LANGUAGE OF WEST AFRICA**

4-5 credits.

For beginning learners of a West African language; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 391

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**AFRICAN 393 – THIRD SEMESTER-A LANGUAGE OF WEST AFRICA**

4 credits.

For intermediate learners of a West African language. Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** AFRICAN 392

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**AFRICAN 394 – FOURTH SEMESTER-A LANGUAGE OF WEST AFRICA**

4 credits.

For intermediate learners of a West African language. Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** AFRICAN 393

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**AFRICAN 399 – DIRECTED STUDY OF AN AFRICAN LANGUAGE**

3 credits.

Directed language study for students experienced in language self instruction. The instructor will continue to consult with the student and monitor progress.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**AFRICAN 402 – THEORY OF AFRICAN LITERATURE**

3-4 credits.

Approaches to the analysis of African oral narrative performances, heroic poetry, epic, and the genres of written literature: Aesthetic, symbolic, and structural analysis and their interrelationships.

**Requisites:** AFRICAN 201, 203, 211, 231, AFRICAN/FOLKLORE/AFRICAN 210, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**AFRICAN 403 – THEORIES OF AFRICAN CULTURAL STUDIES**

3 credits.

A study of culture and cultural production, circulation, consumption, and meaning making in Africa. Discussions foreground material and imaginative cultural forms and practices-their origins, languages, contents, forms, functions, genres, and audiences. Examines the uses to which particular meanings of culture and its forms are put, by whom, and to what purpose, and how meanings are fought over, reshaped, and reconstituted, and under what conditions those are or can be possible. Surveys the entrenched modes of both conceptual and critical apprehension of the cultural forms and practices (from Negritude to postcolonialism and postmodernism), explores their methods of reading, raises the issue of their linkages to sources in Euro-America, and assesses the extent to which the unique concerns of the biography of culture in Africa (expressed by its creators and scholars) have tried to tame and refashion what are now globally shared critical tools of cultural reading.

**Requisites:** Sophomore standing and 3 credits in AFRICAN

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 405 – TOPICS IN AFRICAN CULTURAL STUDIES**

3 credits.

Examines various mediated cultural forms such as broadcasting, news, performance, music, film, or social media created and used across regions and countries in Africa, addressing issues such as cultural identity, nation building, constraints on expression, access, and reception, and the interaction of global and African cultural forms.

**Requisites:** Sophomore standing and 3 credits in AFRICAN, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**AFRICAN 406 – TOPICS IN AFRICAN LITERATURE**

3 credits.

Provides a conceptual focus for the study of various forms of literature from around the African world. Literary forms studied may include novels, drama, poetry, short stories, cinema, and more. Depending on the conceptual focus, texts from a particular region, period, or language may be stressed, or they will coalesce around certain themes, such as modernity, cultural identity, nation building, ideology, globalization, and more.

**Requisites:** Sophomore standing and (AFRICAN 201, 203, 211, 231, or AFRICAN/FOLKLORE/AFRICAN 210), or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**AFRICAN 407 – TOPICS IN AFRICAN LANGUAGES**

3 credits.

Topics in African languages, especially sociocultural linguistics and critical applied linguistics in Africa.

**Requisites:** Sophomore standing and AFRICAN 204, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**AFRICAN 409 – TOPICS IN US AND GLOBAL BLACK MUSIC STUDIES**

3 credits.

Introduces the phenomenon of "musical blackness" as a US-based, transnational cultural form and practice. Explores (topics will vary) how US-based, racially specified black musical forms, together with global forms also identified as "black," were constituted as part of the legacies of European colonial encounter and US imperial expansion; the categories of "traditional" music and popular style took shape and have been experienced as something part and parcel of this historical process. Gives close consideration to genre, style, and performance practice, in order to understand the many ways in which musical sound and social/political ideas are inextricably linked.

**Requisites:** Sophomore standing and 3 credits in AFRICAN, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**AFRICAN 412 – CONTEMPORARY AFRICAN FICTION**

3–4 credits.

A critical study of the major works.

**Requisites:** Sophomore standing and (AFRICAN 201, 203, 211, 231, or AFRICAN/FOLKLORE/AFRICAN 210), or graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**AFRICAN/AFROAMER 413 – CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA**

3–4 credits.

A critical study of the major works.

**Requisites:** Sophomore standing and (AFRICAN 201, 203, 211, 231, or AFRICAN/FOLKLORE/AFRICAN 210), or graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFRICAN/RELIG ST 414 – ISLAM IN AFRICA AND THE DIASPORA**

3 credits.

Explore African Muslim communities and Black Muslim communities in the US as an under-examined archive of Islamic authenticity and authority. Involves close readings of ethnographies, fiction, films, and other forms of cultural expression and examination of the practice of Islam and representation of Muslims in Africa and Muslims of African ancestry in the US. Through both primary and secondary sources, explore themes of not just authenticity and authority but also related issues of representation, positionality, difference, otherness, essentialism, and normativity. Ultimately, form a deeper understanding of the diversity and complexity of Islam and Muslims of African ancestry.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFRICAN 435 – FIFTH SEMESTER SWAHILI**

3 credits.

For advanced learners of Standard Swahili; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 334**Course Designation:** Breadth – Humanities

Frng Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFRICAN 436 – SIXTH SEMESTER SWAHILI**

3 credits.

For advanced learners of Standard Swahili; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** AFRICAN 435**Course Designation:** Breadth – Humanities

Frng Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFRICAN/FRENCH 440 – AFRICAN/FRANCOPHONE FILM**

3 credits.

Overview of cinematic works from francophone Africa and/or other areas of Africa. Teaches analysis and writing about cinema. Explores links between cinema and national or regional politics and ideology. Examines spectatorship in relation to questions of identity formation.

**Requisites:** Sophomore standing and 3 credits in AFRICAN, or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021



### **AFRICAN/COM ARTS/L I S 444 – TECHNOLOGY AND DEVELOPMENT IN AFRICA AND BEYOND**

3 credits.

Surveys the past 20 years of digital technology and communications culture on the African continent, cross-referenced with discourse on technology experiences in other parts of the developing world, through the framework of development studies. Readings include case studies of micro-tech practices as well as political and social use of new media, and government and NGO-led tech interventions. Information Communication Technology for Development (ICT4D) is a key area of focus. Cross-discipline areas include communications and media studies, African, Latin American and International area studies, as well as the social anthropology of technology and science, and design. Think critically about technology use in the context of different tech cultures from around the world. Apply this perspective towards new media solutions to social problems.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **AFRICAN 445 – ADVANCED READINGS IN ARABIC TEXTS**

3 credits.

A selection of Arabic texts, ranging from Classical to modern.

**Requisites:** AFRICAN 330, 344, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

### **AFRICAN/PORTUG 451 – LUSOPHONE AFRICAN LITERATURE**

3 credits.

Chronological and thematic survey of major trends, authors, and works of Lusophone Africa since 1936.

**Requisites:** PORTUG 221 and 312

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **AFRICAN 453 – MODERN AFRICAN LITERATURE IN ENGLISH**

3-4 credits.

Studies modern African literature, written in English, and covering various genres such as poetry, the novel, drama, and/or the short story.

**Requisites:** Sophomore standing and (AFRICAN 201, 203, 211, 231, or AFRICAN/FOLKLORE/AFRICAN 210), or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **AFRICAN/JEWISH/MEDIEVAL/RELIG ST 462 – MUSLIMS AND JEWS**

3 credits.

Explores the historical relationship between Muslims and Jews in a variety of contexts from the seventh century to the present. Surveys literary and cultural exchanges against the background of shifting political and social conditions across the Middle East, Europe, and the United States. Considers also the parallel legacies of anti-Semitism, Orientalism, and Islamophobia. Major themes include comparative religion, secularization, migration, and colonialism, as well as the politics of history and cultural memory. Introduces readings in English translation of medieval and modern texts originally written across languages, and especially in Hebrew and Arabic.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **AFRICAN 475 – FIFTH SEMESTER YORUBA**

3 credits.

Advanced linguistic structures, literature and poetry. Introduction to Yoruba cultures in the works of Wole Soyinka.

**Requisites:** AFRICAN 374

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **AFRICAN 476 – SIXTH SEMESTER YORUBA**

3 credits.

More complex linguistic structure. Proverbs. Yoruba cultural background in the works of Wole Soyinka.

**Requisites:** AFRICAN 475

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016



**AFRICAN 500 – LANGUAGE AND SOCIETY IN AFRICA**

3–4 credits.

Language use in African societies; multilingualism; language in politics, religion, socialization.

**Requisites:** Junior standing and AFRICAN 204, or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**AFRICAN 605 – ADVANCED TOPICS IN AFRICAN CULTURAL STUDIES**

3 credits.

Introduces foundational texts in the study of modern Africa and the social, political, and economic contexts of the continent's cultural production and productivity. Conceptual explorations of interesting issues such as the African encounter with Europe, anticolonialism, race, racialism, and subjectivity, African and European languages and epistemology, transformations in gendered structures, and the environment, and the circulation and consumption of cultural forms and practices. Examines the long histories and theories of cultural production and practices in Africa, the local/global provenance of forms and styles, and the contexts of their local, national, and global circulation and consumption. Promotes critical thinking by putting like and unlike texts together and considering rhetoric and implied meanings, all in the context of Africa's interactive history with the world in the modern era.

**Requisites:** Junior standing and (AFRICAN 402, 403, 405, 406, 407, 409, 412, 413, 440, 453, or 471), or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRICAN 606 – ADVANCED TOPICS IN AFRICAN LITERATURE**

3 credits.

A critical and historical study of selected topics in African literary studies.

**Requisites:** Junior standing and (AFRICAN 402, 403, 405, 406, 407, 409, 412, 413, 440, 453, or 471), or graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**AFRICAN 609 – ADVANCED TOPICS IN GLOBAL BLACK MUSIC STUDIES**

3 credits.

Examines critical concepts in the cultural study of racially specified "black music" as it has developed into a global phenomenon. Pairs major theories in black cultural analysis (postcolonial criticism, diaspora theory, global capitalism, etc.) with a body of literature pertaining to a particular musical topic, geographic area, or tradition. Develops critical skills for undertaking cultural music analysis. Considers the long histories and theories of cultural production and practices in global Africa, the local/global provenance of forms and styles, and the contexts of their local, national, and global circulation and consumption.

**Requisites:** Junior standing and (AFRICAN 402, 403, 405, 406, 407, 409, 412, 413, 440, 453, or 471), or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**AFRICAN 669 – SPECIAL TOPICS**

3 credits.

Special topics across various genres of African Cultural Studies covering cultural production, circulation, consumption, and meaning making in Africa.

**Requisites:** Junior standing and (AFRICAN 402, 403, 405, 406, 407, 409, 412, 413, 440, 453, or 471), or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**AFRICAN 670 – THEORIES AND METHODS OF LEARNING A LESS COMMONLY TAUGHT LANGUAGE**

2 credits.

A theoretical and practical exploration of second language acquisition (SLA) and self-instructional methods. Tests and/or modifies one or more theories/methods by putting these self-instructional methods into practice in order to learn a less commonly taught language (LCTL).

**Requisites:** Concurrent enrollment in AFRICAN 671

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AFRICAN 671 – MULTILANGUAGE SEMINAR**

4 credits.

Discusses use of self-instructional methods to learn a less commonly taught language (LCTL), gets feedback on individualized syllabi and assessment plans, and presents progress reports orally and in writing. Homework includes continuous self-instruction in the chosen LCTL including reading, writing, oral, and listening skills; work with a conversation partner; and cultural knowledge.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFRICAN 672 – INTENSIVE SUMMER MULTILANGUAGE SEMINAR**

8 credits.

A theoretical and practical exploration of second language acquisition (SLA) and self-instructional methods. Test and/or modify one or more theories/methods by putting these self-instructional methods into practice in order to learn a less commonly taught language (LCTL).

**Requisites:** Admitted to Summer Immersion Language Institute (SILI)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**AFRICAN 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing African Cultural Studies Honors in the Major.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 1991**AFRICAN 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing African Cultural Studies Honors in the Major.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 1989**AFRICAN 697 – DIRECTED STUDY OF A LESS COMMONLY TAUGHT LANGUAGE**

3-5 credits.

Monitored self-instruction of a less commonly taught language, meeting individually with the instructor. Requires development of an individualized study plan, bibliographic and online research, work with conversation partners online or in the community, and regular self-assessments.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2017**AFRICAN 698 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**AFRICAN 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**AFRICAN 700 – READING AND WRITING AFRICAN CULTURAL STUDIES**

3 credits.

Covers the norms and expectations that inhere in academic writing as well as the mechanics of producing original scholarship. Designed to develop a full understanding of the craft of marshaling evidence to support an argument in the humanities, particularly African cultural studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFRICAN 701 – ADVANCED TOPICS IN AFRICAN LINGUISTICS**

3 credits.

Advanced study of a topic in African linguistics. Content will vary with each offering.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015

**AFRICAN 703 – TOPICS IN TEACHING AFRICAN LANGUAGES**

1 credit.

Theories and teaching methodologies for second language acquisition plus practical classroom techniques for teaching and directing programs in African languages.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**AFRICAN 704 – TOPICS IN AFRICAN CULTURAL STUDIES PEDAGOGY**

1 credit.

Explores key thematic in the teaching and understanding of African cultural studies. Organized around methodology and pedagogy: what is, how we know, name, and categorize; and how we teach, analyze, and communicate.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**AFRICAN 705 – TEACHING PORTFOLIO**

2 credits.

Develops metacognitive skills and critical thinking about teaching as a scholarly activity, through the creation of a teaching portfolio that documents the ideas and objectives that have informed their teaching to date and potential future teaching.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**AFRICAN 796 – TEACHING APPRENTICESHIP**

3 credits.

Observation and discussion of undergraduate culture course. Consideration of pedagogical issues and limited opportunity for practice teaching.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**AFRICAN 802 – THEORY AND CRITICISM OF AFRICAN LITERATURE**

3 credits.

Through a wide range of theoretical texts and critical reflection, explores the ongoing conversation about cultural production and literary criticism in the context of African cultural studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**AFRICAN 803 – THEORIES OF AFRICAN CULTURAL STUDIES**

3 credits.

A study of culture and cultural production, circulation, consumption, and meaning making in Africa. Discussions foreground material and imaginative cultural forms and practices-their origins, languages, contents, forms, functions, genres, and audiences. Examines the uses to which particular meanings of culture and its forms are put, by whom, and to what purpose, and how meanings are fought over, reshaped, and reconstituted, and under what conditions those are or can be possible. Surveys the entrenched modes of both conceptual and critical apprehension of the cultural forms and practices (from Negritude to postcolonialism and postmodernism), explores their methods of reading, raises the issue of their linkages to sources in Euro-America, and assesses the extent to which the unique concerns of the biography of culture in Africa (expressed by its creators and scholars) have tried to tame and refashion what are now globally shared critical tools of cultural reading.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFRICAN 804 – CRITICAL APPLIED LINGUISTICS WORKING GROUP**

3 credits.

Collaborative exploration and discussion of current research and literature on critical approaches to applied linguistics (CALx), including critical discourse analysis (CDA), mostly in African contexts. Develop a large-scale research project (QP or doctoral dissertation), conduct a review of current research, and present work in progress to receive critical feedback.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 10 number of completions

**Last Taught:** Spring 2023

**AFRICAN/AFROAMER 813 – CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA**

3 credits.

Historical and critical study of the classics of contemporary African and Caribbean literary drama written in English. Thematic issues include the African encounter with Europe, postcolonial disillusionment and the betrayal of ideals, and also stylistic matters as the relationship(s) between traditional drama and other performance forms, and modern drama written in European languages. Considers theories and critical approaches to understanding the cross-continental drama traditions and their contexts. Examines the long histories of cultural, performance, and theatrical relationships between Africa and the Caribbean and how the relationships have been shaped by race and economics, past and present. Considers and questions conventional claims made by others and your own assumptions; stimulates analytical thinking about identity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**AFRICAN 901 – SEMINAR IN MODERN AFRICAN LITERATURE**

3 credits.

Special topics in modern African literature, covering various genres (prose, poetry, drama).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**AFRICAN 905 – SEMINAR IN AFRICAN CULTURAL STUDIES: TOPICS**

3 credits.

Examines various mediated cultural forms such as broadcasting, news, performance, music, film, or social media created and used and across regions and countries in Africa, addressing issues such as cultural identity, nation building, constraints on expression, access, and reception, and the interaction of global and African cultural forms.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRICAN 926 – SEMINAR IN RESEARCH METHODS IN AFRICAN CULTURAL STUDIES**

3 credits.

Field methods, techniques, and analytical approaches. Topics vary but may include ethnography, narrative analysis, critical discourse analysis, and other research methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**AFRICAN/ANTHRO/ECON/GEOG/HISTORY/POLI SCI 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**AFRICAN 990 – THESIS**

1-9 credits.

Advanced level mentored reading, writing, and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRICAN 999 – INDEPENDENT READING AND RESEARCH**

1-3 credits.

Advanced level mentored reading, writing, and research for dissertators.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFRO-AMERICAN STUDIES (AFROAMER)****AFROAMER/AMER IND/ASIAN AM/CHICLA/FOLKLORE 102 – INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES**

3 credits.

Introduction to comparative ethnic studies, examining race, ethnicity, and indigeneity within the United States. Includes perspectives from African American, American Indian, Asian American, and Chican@ and Latin@ studies.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFROAMER 151 – INTRODUCTION TO CONTEMPORARY AFRO-AMERICAN SOCIETY**

3 credits.

Survey of the characteristics and problems of African Americans in contemporary society.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**AFROAMER 154 – HIP-HOP AND CONTEMPORARY AMERICAN SOCIETY**

3 credits.

The aesthetic and political evolution of hip-hop culture and its relationship to contemporary social issues.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFROAMER 155 – THEY: RACE IN AMERICAN LITERATURE**

3 credits.

The evolution of stereotypes. The literary manifestations of the assumptions black and white American writers hold toward members of the opposite race.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**AFROAMER 156 – BLACK MUSIC AND AMERICAN CULTURAL HISTORY**

3 credits.

Examines the interaction between African American musical culture and its historical context, with an emphasis on the period from 1920 to the present.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 199 – DIRECTED STUDY**

1-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFROAMER/AFRICAN 220 – HIPHOP, YOUTH CULTURE, AND POLITICS IN SENEGAL**

3 credits.

Explores how HipHop, a quintessential manifestation of African American culture, is adopted and adapted by African youth to fight for social justice and democracy in their local contexts, while at the same time constructing a diasporic African sensibility and "cultural citizenship" that transcends borders and oceans. Beginning with the history, culture, and politics of HipHop in the U.S., we compare and contrast HipHop's development in Africa with specific attention to Senegal. Explores the the youth culture and politics in Senegal and the ongoing process of cross-cultural flows and hybridity.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**AFROAMER/GEN&WS 221 – INTRODUCTION TO BLACK WOMEN'S STUDIES**

3 credits.

This course will provide students with an overview of the field of Black women's studies.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**AFROAMER/GEN&WS 222 – INTRODUCTION TO BLACK WOMEN WRITERS**

3 credits.

An introduction to the writings of Afro-American women from the nineteenth to the twentieth century. Fiction, autobiography, non-fiction prose, and poetry will be read and discussed.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 225 – INTRODUCTION TO AFRICAN AMERICAN DRAMATIC LITERATURE**

3 credits.

Introduction to the history of African American theater and major African American playwrights and actors.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 227 – MASTERPIECES OF AFRICAN AMERICAN LITERATURE**

3 credits.

Analysis of major works of African American fiction, drama, poetry and autobiography. Attention given to historical, cultural and biographical contexts.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**AFROAMER 231 – INTRODUCTION TO AFRO-AMERICAN HISTORY**

3 credits.

Survey from the African beginnings to the present day. Focus on slave trade and slavery; major black figures of the past; social, economic, and political trends within the black community.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/AFRICAN 233 – GLOBAL HIPHOP AND SOCIAL JUSTICE**

3 credits.

Critical interrogation of the relationship between HipHop and social justice. What is "HipHop," what is "social justice," what is their relationship, how can HipHop can be an effective force for social justice, and what obstacles mitigate against this potential? Discussions will develop familiarity with important concepts in Black studies and social theory such as race and colonialism, imperialism and hegemony, structure and agency, identity and strategic essentialism. Consider the race/class/gender dimensions of weekly topics, acquire a broader familiarity with HipHop activism, and develop new conceptual tools and critical thinking skills.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/ART HIST 241 – INTRODUCTION TO AFRICAN ART AND ARCHITECTURE**

3 credits.

Examines the rich heritage of African arts and architecture as they shape and have been shaped by the histories and cultural values (social, political, religious, philosophical, and aesthetic) of African peoples, both past and present, on the continent where humanity began. It includes an historical overview of selected artistic traditions from different parts of the continent from 26,000 BCE to the 21st century and thematic/cultural case studies: artists and aesthetics; textiles, decorative, and personal/body arts; architecture; and individual artists.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**AFROAMER/ART HIST 242 – INTRODUCTION TO AFRO-AMERICAN ART**

3 credits.

Historical survey of African American art. Beginning with the African heritage and concluding with creativity of the 1970's, examine the evolution of African American art. Attention to the aesthetic sensibilities of diverse styles as well as the social significance of Black art within the art arena.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/  
POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN  
INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 265 – AFRICAN-AMERICAN AUTOBIOGRAPHY**

3 credits.

Autobiographies of major African Americans studied in depth to locate the constants and variables in the Black American experience. Focus on the variety of individual responses to conditions in the United States.

**Requisites:** Sophomore standing; not open to special students**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021



**AFROAMER/GEN&WS 267 – ARTISTIC/CULTURAL IMAGES OF BLACK WOMEN**

3 credits.

Cultural images by and about Black women; feminine creativity in the arts within their historical, cultural, social, and political contexts.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 271 – SELECTED TOPICS IN AFRICAN AMERICAN CULTURE**

3 credits.

Introductory level course on specific topics in African American culture.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFROAMER 272 – RACE AND AMERICAN POLITICS FROM THE NEW DEAL TO THE NEW RIGHT**

3 credits.

Survey of the decisive role played by race in American politics, 1932-present. Focus on origins and accomplishments of "the Second Reconstruction"; Black Power and white backlash; contemporary racial politics and issues.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER/HIST SCI 275 – SCIENCE, MEDICINE, AND RACE: A HISTORY**

3-4 credits.

Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. Pays particular attention to the importance of racial science in slavery and colonialism.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/AFRICAN/ANTHRO/GEOG/HISTORY/POLI SCI/SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER/AFRICAN/HISTORY/POLI SCI 297 – AFRICAN AND AFRICAN-AMERICAN LINKAGES: AN INTRODUCTION**

4 credits.

Analysis of retention of African elements in African-American oral, written, and material culture. Social, cultural, and political issues regarding race, self-definition, and self-determination in both Africa and North America will be examined.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**AFROAMER 302 – UNDERGRADUATE STUDIES IN AFRO-AMERICAN HISTORY**

3 credits.

In-depth treatment of a key theme in black historical studies.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFROAMER 303 – BLACKS, FILM, AND SOCIETY**

3 credits.

Study of the interpretations of the African American past conveyed via theatrical films and television; relationship to other images of blacks found throughout the popular culture; relationship to societal trends.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020



### **AFROAMER/DANCE/MUSIC 318 – CULTURAL CROSS CURRENTS: WEST AFRICAN DANCE/MUSIC IN THE AMERICAS**

3 credits.

The influence of traditional West African dance/music heritage in historical, artistic, social contexts in the development of new hybrid forms of music/dance created by cross-pollination of cultures of Africans, Europeans and indigenous peoples in the New World.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **AFROAMER/ASIAN AM/DANCE/FOLKLORE 319 – AFRO ASIAN IMPROV: FROM HIP HOP TO MARTIAL ARTS FUSION**

3 credits.

An Afro Asian perspective provides a lens through which intersections between Asian American and African American dance and martial arts are studied and practiced. Asian American and African American movement genres provide tools to explore dance fusion, choreography, and improvisation, to create dances informed by African American and Asian American legacies of struggle, innovation and transformation, while cognizant of historical forces of oppression and racism. Building connections through respectful communication with others are learned through dance practice, discussion and writing about concepts learned through readings, videos, and guest artist visits. Engagement with dance as a cultural vehicle for creative problem-solving and risk-taking occurs through guided class or smaller group activities.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **AFROAMER/HISTORY 321 – AFRO-AMERICAN HISTORY SINCE 1900**

3-4 credits.

Survey of African American history from 1900 to the present. Topics covered include segregation, the Civil Rights Movement, the political, social and cultural changes of the late 20th century, and the Obama presidency.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **AFROAMER/HISTORY 322 – AFRO-AMERICAN HISTORY TO 1900**

3-4 credits.

Survey of African American history from its roots in Africa to the end of the 19th century. Topics considered include the slave trade, the political and cultural practices of enslaved communities, forms of resistance, Reconstruction, and systems of segregation.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **AFROAMER/GEN&WS 323 – GENDER, RACE AND CLASS: WOMEN IN U.S. HISTORY**

3 credits.

Historical interplay of racism and sexism in the lives of Black and White women of different class backgrounds in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

### **AFROAMER/GEN&WS 324 – BLACK WOMEN IN AMERICA: RECONSTRUCTION TO THE PRESENT**

3 credits.

Explores African American women's experience from waning days of slavery to present. Topics include slavery, emancipation, reconstruction, segregation, migration, urban and rural poverty, civil rights, nationalism, feminism and sexual politics.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**AFROAMER/GEN&WS 326 – RACE AND GENDER IN POST-WORLD WAR II U.S. SOCIETY**

3 credits.

Assesses how race and gender (as well as socio-economic status, age, sexuality, region, etc.) shaped the experiences and options of African Americans, especially women, in U.S. society from WW II to the present.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/GEN&WS 333 – BLACK FEMINISMS**

3 credits.

Uses an interdisciplinary framework to interrogate core assumptions, arguments, and silences in past and present black feminist thought.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**AFROAMER 337 – THE HARLEM RENAISSANCE**

3 credits.

Black literature and culture during the 1920's. Focus on unique Black literary expression of era, historical background, esthetics, polemical essays.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER 338 – THE BLACK ARTS MOVEMENT**

3 credits.

Focuses on the notion of blackness as it is developed in the poetry and drama of key figures of the 1960s Black Arts Movement. Emphasizes the emergence of a critical discourse specific to a "new" black aesthetic.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/HISTORY 347 – THE CARIBBEAN AND ITS DIASPORAS**

3-4 credits.

Surveys the history of the Caribbean from the 15th century to the present. Emphasizes the importance of colonialism, commodity-based capitalism, globalization, slavery, and forced labor for the modeling of the region's social, economic, cultural, and political structures. Pay particular attention to the resilient, creative and resourceful ways in which Caribbean people have responded to these adverse conditions. Examine the circumstances that have shaped migrations from the region to the United States and Canada during the 20th and 21st centuries. Study how these diasporic communities have created social spaces in these two countries that have remained closely linked to the Caribbean through economic, political, and filial networks.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/GEN&WS 367 – ART AND VISUAL CULTURE: WOMEN OF THE AFRICAN DIASPORA AND AFRICA**

3 credits.

Art and visual culture by/or pertaining to women throughout the African Diaspora and Africa. Though the focus is on 10th century art by black women, it will go into visual culture (art objects, photographs, images, dress, culturally-coded representation) concerning black women historically.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**AFROAMER/HISTORY 393 – SLAVERY, CIVIL WAR, AND RECONSTRUCTION, 1848-1877**

3-4 credits.

African-American slavery and its impact on mid-19th century social, political, and economic life; the causes, course, and consequences of the Civil War; the rise and fall of postwar Reconstruction and non-racial citizenship; the impact of these histories on contemporary American society.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**AFROAMER/RELIG ST 404 – AFRICAN AMERICAN RELIGIONS**

3 credits.

Explores the varieties of African American religious expressions from the colonial era to the present with emphasis on racism and resistance, marginalization and resilience, creative expression and the continued influence of Africa and the Caribbean.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**AFROAMER/AFRICAN 413 – CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA**

3-4 credits.

A critical study of the major works.

**Requisites:** Sophomore standing and (AFRICAN 201, 203, 211, 231, or AFRICAN/FOLKLORE/AFRICAN 210), or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER 456 – SOUL MUSIC AND THE AFRICAN AMERICAN FREEDOM MOVEMENT**

3 credits.

Focus on the place of music, musicians and the music industry in the African American Freedom Movement from the 1950s to the mid-1970s. Emphasis on the role of the black church, the organizing tradition, and the transition from Civil Rights to Black Power.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**AFROAMER 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**AFROAMER 501 – 19TH CENTURY AFRO-AMERICAN LITERATURE**

3 credits.

Historical and critical analysis of the poetry, fiction, and drama of 19th century African American writers. Also focuses on the essays of major African American intellectuals such as W.E.B. DuBois and Anna Julia Cooper.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2015**AFROAMER/POLI SCI 519 – AFRICAN AMERICAN POLITICAL THEORY**

3-4 credits.

Explores a range of theories that African Americans have drawn upon to cope with and ameliorate their political circumstances in the United States within the specific parameters of political theory.

**Requisites:** Sophomore standing and (POLI SCI 160 or AFROAMER 151) or (POLI SCI 209 taken prior to fall 2017) or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AFROAMER/HIST SCI/MED HIST 523 – RACE, AMERICAN MEDICINE AND PUBLIC HEALTH**

3 credits.

Provides historical perspectives on current dilemmas facing black patients and health care professionals.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020

**AFROAMER 525 – MAJOR AUTHORS**

3 credits.

Intensive literary criticism of the works of selected authors. Emphasis on fiction, but non-fiction when appropriate. Works of one or two authors.

**Requisites:** Junior standing; not open to special students

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFROAMER/ED POL 567 – HISTORY OF AFRICAN AMERICAN EDUCATION**

3 credits.

An examination of the social, economic, political, and cultural issues influencing the education of Black Americans from the early nineteenth century to the 1960s.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**AFROAMER/GEN&WS 624 – AFRICAN AMERICAN WOMEN'S ACTIVISM (19TH & 20TH CENTURIES)**

3 credits.

Examines Black women's struggles for racial justices; reconsiders conventional notions of leadership, politics and protest. Topics include abolitionism, anti-lynching campaigns, woman suffrage, labor movement, club movement, cultural expressions, civil rights protest, Black feminism/womanism, poverty and welfare rights, environmental racism, etc.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFROAMER/GEN&WS 625 – GENDER, RACE AND THE CIVIL RIGHTS MOVEMENT**

3 credits.

This course focuses on the emerging field of gender studies in the scholarship on the post-World War II civil rights movement in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AFROAMER/HISTORY 628 – HISTORY OF THE CIVIL RIGHTS MOVEMENT IN THE UNITED STATES**

3 credits.

Civil rights history from 1930–1970. Legal, historical and economic origins of the civil rights movement. Study of the movement's impact on United States culture, politics, and international relations.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFROAMER 631 – COLLOQUIUM IN AFRO-AMERICAN HISTORY**

3 credits.

Research and discussion of topics in African American History.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**AFROAMER 669 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**AFROAMER 671 – SELECTED TOPICS IN AFRO-AMERICAN HISTORY**

3 credits.

An intensive analysis of specific historical themes in African Americans' experiences.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFROAMER/ENGL 672 – SELECTED TOPICS IN AFRO-AMERICAN LITERATURE**

3 credits.

An intensive analysis of specific themes in the Afro-American experience. Subjects vary with instructor.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFROAMER 673 – SELECTED TOPICS IN AFRO-AMERICAN SOCIETY**

3 credits.

An intensive analysis of specific societal themes in African Americans' experiences.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**AFROAMER 675 – SELECTED TOPICS IN AFRO-AMERICAN CULTURE**

3 credits.

An intensive analysis of specific cultural themes in African Americans' experiences.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AFROAMER/GEN&WS 677 – CRITICAL AND THEORETICAL PERSPECTIVES IN BLACK WOMEN'S WRITINGS**

3 credits.

Analyses and interpretations of literary works by black women writers through historical, philosophical, political, feminist, and other contemporary critical methods.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AFROAMER/GEN&WS 679 – VISUAL CULTURE, GENDER AND CRITICAL RACE THEORY**

3 credits.

Examines tensions between visual and verbal representations that variably construct and negotiate power relations in racialized human experience.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**AFROAMER 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2007

**AFROAMER 682 – SENIOR HONOR THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2008

**AFROAMER 691 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2010

**AFROAMER 692 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2010

**AFROAMER 699 – DIRECTED STUDY IN AFRO-AMERICAN STUDIES**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**AFROAMER/ED POL/HISTORY 712 – EDUCATION AND THE CIVIL RIGHTS MOVEMENT**

3 credits.

Explores the historical relationship between education and the African American freedom struggle from the early twentieth century to the present. Topics include school segregation, desegregation, and resegregation; high school and college student activism; Black Power; civil rights protest strategies and tactics, and the role of the federal government.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**AFROAMER 790 – RESEARCH AND THESIS**

1-12 credits.

Mentored individual research and study for students completing a Master's thesis.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFROAMER/ART HIST 801 – HISTORIOGRAPHY, THEORY AND METHODS IN VISUAL CULTURE**

3 credits.

Focuses on the knowledge, theories, and methods that are fundamental to the transdisciplinary discipline of Visual Cultures. Develops skills in critical reading, research, analysis, writing, and oral presentation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AFROAMER/ART HIST 802 – VISUAL CULTURES: TOPICS IN VISUAL CULTURES**

3 credits.

Content will vary to facilitate in-depth engagement with a particular topic in Visual Culture. Topics will be pursued with analytic attention to gender, sexuality and race.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AFROAMER/AFRICAN 813 – CONTEMPORARY AFRICAN AND CARIBBEAN DRAMA**

3 credits.

Historical and critical study of the classics of contemporary African and Caribbean literary drama written in English. Thematic issues include the African encounter with Europe, postcolonial disillusionment and the betrayal of ideals, and also stylistic matters as the relationship(s) between traditional drama and other performance forms, and modern drama written in European languages. Considers theories and critical approaches to understanding the cross-continental drama traditions and their contexts. Examines the long histories of cultural, performance, and theatrical relationships between Africa and the Caribbean and how the relationships have been shaped by race and economics, past and present. Considers and questions conventional claims made by others and your own assumptions; stimulates analytical thinking about identity.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

## AGRICULTURAL AND APPLIED ECONOMICS (A A E)

**A A E 1 – COOPERATIVE EDUCATION/CO-OP IN AGRICULTURAL & APPLIED ECONOMICS**

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working. The same work experience may not count towards credit in A A E 399. Students must have a declared major in Agricultural and Applied Economics or Agricultural Business Management and will require consent of the supervising instructor and academic advisor.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015



**A A E 215 – INTRODUCTION TO AGRICULTURAL AND APPLIED ECONOMICS**

4 credits.

Introduction to economic ways of thinking about a wide range of problems and issues. Topics include consumption, production, prices, markets, finance, trade, pollution, growth, farms, taxes, and development.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed – Quantitative Reasoning Part B Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E/ENVIR ST 244 – THE ENVIRONMENT AND THE GLOBAL ECONOMY**

4 credits.

The "economic way of thinking" about global and regional environmental issues. Topics include climate change, biodiversity preservation, ocean fisheries, environmental impacts of international trade, poverty and the environment, and sustainability.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 246 – CLIMATE CHANGE ECONOMICS AND POLICY**

3 credits.

Climate change and the role of applied economics in related policy analysis and research. Economics of mitigation, adaptation and geo-engineering; integrated assessment; environmental implications of energy use; climate change impacts on land use. Use of economic analysis and modeling for public policy design.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 267 – CAREER DEVELOPMENT FOR AAE & ABM MAJORS**

1 credit.

Career and professional development geared toward the field of agricultural and applied economics or agricultural business management. Topics include resumes, cover letters, interviewing skills, internship and job applications, writing, career exploration, and networking. Panelists include faculty, alumni, and employers.

**Requisites:** Sophomore standing and declared in Agricultural and Applied Economics or Agricultural Business Management BS

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work under direct guidance of an AAE faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**A A E 299 – INDEPENDENT STUDY**

1-3 credits.

Research work under direct guidance of a faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**A A E/ECON/REAL EST/URB R PL 306 – THE REAL ESTATE PROCESS**

3 credits.

Introductory overview focused on the key aspects of the real estate process: developing real estate, permitting real estate, buying and selling real estate, understanding the economics of real estate, financing real estate, valuing real estate, leasing real estate, and managing real estate.

**Requisites:** (ECON 101, 111, or A A E 215) or declared in undergraduate

Business Exchange program

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 319 – THE INTERNATIONAL AGRICULTURAL ECONOMY**

3 credits.

The nature of trade in agricultural products, trade policies and practices of importing and exporting nations, agricultural policies of major trading blocks, market instability and other primary commodity problems, recent history and current developments in multilateral trade policy.

**Requisites:** A A E 215, ECON 101, or 111

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**A A E 320 – AGRICULTURAL SYSTEMS MANAGEMENT**

3 credits.

Application of economics to managing agricultural production systems. Topics include optimizing agricultural production, farm financial analysis, tax management, business entities, federal commodity support programs, and the structure and challenges in the US agricultural sector.

**Requisites:** A A E 215, ECON 101, or 111

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 322 – COMMODITY MARKETS**

4 credits.

Principles and practices in marketing systems for U.S. agricultural commodities. Vertical organization; forward contracts, future markets, agricultural options and price formation. Alternate management at the farm, processor, wholesale and retail levels.

**Requisites:** A A E 215, ECON 101, or 111**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 323 – COOPERATIVES AND ALTERNATIVE FORMS OF ENTERPRISE OWNERSHIP**

3 credits.

Cooperatives, credit unions, and other alternative forms of enterprise are unique businesses in which users (rather than investors) are the owners. Topics will include why these models emerge, who they serve, how they differ from other forms of enterprise, and the ways in which they can be used to address social, economic, and environmental challenges.

**Requisites:** Sophomore standing and satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 335 – INTRODUCTION TO DATA ANALYSIS USING SPREADSHEETS**

2 credits.

Introduction to data analysis for social scientists using spreadsheets software – with specific applications to economics, business and finance – including data management and manipulation; formulas and calculations; data visualization and presentation using charts and graphics; statistical and visual analysis of economic indicators using tables, functions, graphs and descriptive statistics; and optimization of functions with economic and financial data.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E/C&E SOC/SOC 340 – ISSUES IN FOOD SYSTEMS**

3–4 credits.

With primary emphasis on the U.S., the course covers social, economic and biological dimensions of food systems. Using classroom and community experience, the course combines academic approaches with practitioner knowledge. A community project is required.

**Requisites:** SOC/C&E SOC 140, CE SOC/SOC 181, 210, or 211**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E/ECON/ENVIR ST 343 – ENVIRONMENTAL ECONOMICS**

3–4 credits.

Microeconomic principles underlying the use of natural resources such as air, water, forests, fisheries, minerals and energy. These principles are applied in the examination of pollution control, preservation vs. development, deforestation, and other environmental issues.

**Requisites:** A A E 215, ECON 101, or 111**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E/AGRONOMY/NUTR SCI 350 – WORLD HUNGER AND MALNUTRITION**

3 credits.

Hunger and poverty in developing countries and the United States. Topics include: nutrition and health, population, food production and availability, and income distribution and employment.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 352 – GLOBAL HEALTH: ECONOMICS, NATURAL SYSTEMS, AND POLICY**

4 credits.

Sustaining global health and well-being depends critically on interactions between human and natural systems at multiple spatial and temporal scales. Economics provides a useful paradigm for understanding these interactions and the pathways through which individual and societal decisions made in the face of scarce resources, and threats to the natural environment, generate health and well-being outcomes. Provides students with an opportunity to use basic economic and social science reasoning to describe global health challenges; understand the causes and consequences of health discrepancies; evaluate health and environmental policies; and appreciate the interconnectedness of planetary health and economic outcomes.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **A A E/AGRONOMY/HORT/PL PATH 367 – INTRODUCTION TO ORGANIC AGRICULTURE: PRODUCTION, MARKETS, AND POLICY**

3 credits.

Provides an in-depth understanding of the history of organic agriculture, its production, processing, marketing, and social dimensions, and its impact on environmental, community, and human health.

**Requisites:** AGROECOL/AGRONOMY/CE SOC/ENTOM/ENVIR ST/ AGROECOL/AGRONOMY/C&E SOC/ENTOM 103 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **A A E/ECON 371 – ENERGY, RESOURCES AND ECONOMICS**

3 credits.

Use microeconomic theory to analyze energy markets. Discuss the economics of oil, gas, and electricity and learn about applications to contemporary issues and policy questions.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **A A E/INTL ST 373 – GLOBALIZATION, POVERTY AND DEVELOPMENT**

3 credits.

Addresses the process of globalization -- trade, international capital flows, labor migration and remittances, and aid -- from the perspective of developing economies and the development process.

**Requisites:** A A E 215, ECON 101, 102, or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **A A E/INTL ST 374 – THE GROWTH AND DEVELOPMENT OF NATIONS IN THE GLOBAL ECONOMY**

3 credits.

This course explores the roles of markets, states, and civil institutions, using economic theory, computer simulations, and historical experience to better understand the forces that shape the wealth and well-being of nations and people around the world.

**Requisites:** A A E 215, ECON 101, 102, or 111

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **A A E 375 – SPECIAL TOPICS**

1-4 credits.

Special topics on contemporary issues relevant to agricultural and applied economics.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **A A E 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Agricultural and Applied Economics and internship site supervisor. Students are responsible for arranging the work and credits with the AAE faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **A A E 400 – STUDY ABROAD IN AGRICULTURAL AND APPLIED ECONOMICS**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

### **A A E 419 – AGRICULTURAL FINANCE**

3 credits.

Introduction to basic finance concepts. Topics include financial statements, ratio analysis and interpretation, investment analysis, capital budgeting, credit concepts, and capital markets.

**Requisites:** A A E 215, ECON 101, or 111

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **A A E/ECON 421 – ECONOMIC DECISION ANALYSIS**

4 credits.

Managerial oriented, applied presentation of microeconomic theory. Quantitative emphasis with extensive homework use of spreadsheets and written executive summaries of applied economic analyses. Applications on natural resources and agricultural markets.

**Requisites:** STAT 301, 371, ECON 310, CE SOC/SOC/C&E SOC 360, PSYCH 210, or (GEN BUS 306 and 307)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 422 – FOOD SYSTEMS AND SUPPLY CHAINS**

3 credits.

Examination of the structure of supply chains for food and agriculture and key business decisions in the the broader context of food systems.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E/ECON/INTL BUS 462 – LATIN AMERICAN ECONOMIC DEVELOPMENT**

3 credits.

A historico-institutional analysis of development problems in the principal Latin American countries, with attention to differentiation of national growth patterns and alternative development strategies.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E/ECON 473 – ECONOMIC GROWTH AND DEVELOPMENT IN SOUTHEAST ASIA**

3 credits.

Evaluates economic development strategies in Southeast Asia and their implications for growth, distribution and environment. Students learn trade and development theory as well as specific knowledge of Southeast Asian economic development.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**A A E/ECON 474 – ECONOMIC PROBLEMS OF DEVELOPING AREAS**

3 credits.

Analyzes aggregate growth, income distribution and poverty in lower income economies. Uses microeconomics of imperfect labor, capital and insurance markets to explore why some individuals advance economically as their economies grow and others fall behind. Considers implications of aggregate and micro analysis for national and international economic policy.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E/ECON 477 – AGRICULTURAL AND ECONOMIC DEVELOPMENT IN AFRICA**

3 credits.

Composition, organization, and techniques of agricultural production; economic change and development of agriculture, economic policies, special problems of developing African agriculture.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 500 – SENIOR CAPSTONE EXPERIENCE**

3 credits.

Teaches students how to apply economic theory to economic problems, utilize quantitative techniques in economic analyses, and communicate findings and results of economic analyses.

**Requisites:** Senior standing and (declared in Agricultural Applied Economics, B.S. or Agricultural Business Management, B.S.)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E/REAL EST/URB R PL 520 – COMMUNITY ECONOMIC ANALYSIS**

3 credits.

Economic theory (location and growth) applicable to community economic development; the role of private and public sector in local economic development, and techniques for economic analysis of community.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E/ECON 526 – QUANTITATIVE METHODS IN AGRICULTURAL AND APPLIED ECONOMICS**

4 credits.

Use of quantitative methods (mathematics, statistics, and optimization) to analyze problems faced by decision makers in natural resources and agriculture. Extensive homework requiring use of quantitative methods via spreadsheet tools to solve problems from an applied decision context.

**Requisites:** (MATH 211 or 221), ECON 301, and STAT 301, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**A A E/ECON/F&W ECOL 531 – NATURAL RESOURCE ECONOMICS**

3 credits.

Economic concepts and tools relating to management and use of natural resources, including pricing principles, cost-benefit analysis, equity, externalities, economic rent, renewable and nonrenewable resources, and resource policy issues.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E/M H R 540 – INTELLECTUAL PROPERTY RIGHTS, INNOVATION AND TECHNOLOGY**

3 credits.

Uses economic concepts to illustrate the nature of technological innovation, competition, and economic growth. Topics: economics of the intellectual property protection (IPP); market structure and innovation; interaction between public and private sectors; IPP and anticompetitive policies; globalization.

**Requisites:** Graduate/professional standing and (ECON 301 or 311)

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**A A E/CIV ENGR/ENVIR ST/URB R PL 561 – ENERGY MARKETS**

3 credits.

Energy resources are an essential element of the world's business, political, technical and environmental landscape. Analytic tools provided by the discipline of economics expands our understanding of this critical issue. Energy supply markets reviewed include both fossil fuels and renewable resources. Energy demand sectors include residential, commercial, industrial and transportation. Electricity represents an intermediate energy market. The interactions among these markets participants indicate how scarce resources are allocated among competing needs in the world economy.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**A A E 625 – AGRIBUSINESS ECONOMICS AND MANAGEMENT**

3 credits.

Includes a sequential study of subject material in agribusiness management and managerial economics related to the management of agricultural businesses. Topics related to agribusiness management in the U.S., including organizational structure, marketing, strategy, financial statements, financing and production planning. Concepts from managerial economics as applied to the agribusiness firm, including production theory, cost analysis, pricing strategies, cost-benefit analysis, investment decisions and competition strategies.

**Requisites:** (ECON 301 or 311) and A A E 335, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**A A E 635 – APPLIED MICROECONOMIC THEORY**

3 credits.

Microeconomic theory applied to consumers, producers, markets, and welfare analysis. Emphasis is on the mathematics of duality and optimization methods. Computer applications of the theory. One semester of linear algebra highly recommended.

**Requisites:** MATH 222 and (ECON 301 or 311), or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 636 – APPLIED ECONOMETRIC ANALYSIS I**

3 credits.

Introduction to the standard linear regression model with an emphasis on application issues. Includes statistical foundation, hypothesis testing, functional form, model selection and procedures for handling violations of model assumption.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 637 – APPLIED ECONOMETRIC ANALYSIS II**

4 credits.

Focus on extending the standard regression model. Topics include nonlinear regression models, maximum likelihood estimation, panel data, simultaneous equations, linear and nonlinear systems, analysis of discrete choice, limited dependent variables, empirical economic applications and policy analysis.

**Requisites:** A A E 636

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 641 – FOUNDATIONS OF AGRICULTURAL ECONOMICS**

3 credits.

Overview of the economic performance of agriculture in feeding the growing world population. Examines contemporary economic issues in the food sector, along with research methods used in their analysis. Covers production analysis, risk and uncertainty, food demand, market structure, policy and welfare analysis.

**Requisites:** A A E 635 and 636**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**A A E 642 – FOUNDATIONS OF DEVELOPMENT ECONOMICS**

3 credits.

An overview of development economics, covering both basic theory and empirical applications. Topics include economic growth, trade, measurement of poverty and inequality, human capital, agricultural household models, technology adoption, migration, credit, savings, insurance, infrastructure, and the environment.

**Requisites:** A A E 635 and 636**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 643 – FOUNDATIONS OF ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS**

3 credits.

Survey of historical topics and contemporary research questions in environmental and resource economics. Focus areas include foundational models of human/environment interaction, definition and evaluation of the suite of environmental policy instruments, measuring environmental costs and benefits, and examining natural resource use.

**Requisites:** A A E 635 and 636**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E/ENVIR ST/F&W ECOL 652 – DECISION METHODS FOR NATURAL RESOURCE MANAGERS**

3-4 credits.

Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests.

**Requisites:** A A E 215, ECON 101, or 111**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Biological Sci. Counts toward the Natural Sci req  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 670 – MATHEMATICS FOR AGRICULTURAL AND APPLIED ECONOMICS**

3 credits.

The fundamental mathematics and statistics necessary for the study of quantitative methods in agricultural and applied economics (AAE). Topics include the mathematics of optimization and its role in basic welfare theory and consumer demand; linear and matrix algebra and their application in both modeling consumer behavior and the statistical analysis of models; and the fundamentals of statistical analysis relevant to econometric analysis, including probability theory, sampling distributions and statistical inference.

**Requisites:** (ECON 101, 111 or A A E 215) and (MATH 211, 217, 221 or 275) or graduate/professional standing**Repeatable for Credit:** No**A A E/ECON/ENVIR ST/URB R PL 671 – ENERGY ECONOMICS**

3 credits.

The method, application, and limitations of traditional economic approaches to the study of energy problems. Topics include microeconomic foundations of energy demand and supply; optimal pricing and allocation of energy resources; energy market structure, conduct, and performance; macro linkages of energy and the economy; and the economics of regulatory and other public policy approaches to the social control of energy.

**Requisites:** Graduate/professional standing or (senior standing and A A E 215, ECON 101, or 111)**Course Designation:** Breadth - Social Science  
Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**A A E 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Requires consent of supervising instructor. Enrolled in CALS Honors Program.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2009**A A E 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Requires consent of supervising instructor. Continuation of 681. Enrolled in CALS Honors Program.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2010



**A A E 691 – SENIOR THESIS**

2 credits.

Individual study for majors completing theses for AAE degrees as arranged with a faculty member. Requires consent of supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E 692 – SENIOR THESIS**

2 credits.

Individual study for majors completing theses for AAE degrees as arranged with a faculty member. Requires consent of supervising instructor.

Continuation of A A E 691.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 699 – SPECIAL PROBLEMS**

1-4 credits.

Independent research guided by an AAE faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**A A E 705 – APPLIED MICROECONOMICS**

3 credits.

Focuses on developing a conceptual as well as empirical analysis of microeconomic behavior, including production and consumption analysis, technical change, and investment. Emphasizes empirical applications of microeconomics, with implications for efficiency and welfare analysis. Knowledge of statistics such as STAT/MATH 309 is recommended.

**Requisites:** A A E 635 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**A A E 706 – APPLIED RISK ANALYSIS**

3 credits.

Conceptual empirical analysis of economic behavior under risk and its implications for management and policy decisions. Emphasis on economic applications to the agricultural and food sector.

**Requisites:** A A E 635 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 718 – DATA SCIENCE FOR AGRICULTURAL AND APPLIED ECONOMICS**

3 credits.

Introduction to data and data processing using both Python and R programming languages. Concepts covered include loading data, data acquisition, cleaning data, visualization/exploring data, and storing data.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**A A E 719 – APPLIED BUSINESS ECONOMICS**

3 credits.

Overview of fundamental topics related to macroeconomics, economic measurement and financial markets, with specific applications to agricultural business and policy. Concepts include fiscal and monetary policy, the money system, models of aggregate supply and demand, business cycles, financial instruments, productivity, measurements and indicators of employment and economic growth, financial institutions, forecasting, and international trade and finance.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 720 – SEMINAR IN QUANTITATIVE AND APPLIED ECONOMICS**

1 credit.

This is a 1 credit seminar that will be offered each spring. There will be different presenters each year.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**A A E 721 – PROFESSIONAL COMMUNICATION OF APPLIED ECONOMIC ANALYSIS**

1 credit.

Focuses on professional communication in a variety of contexts. Examples include but are not limited to: presenting results for technical and non-technical audiences, writing about research findings, synthesizing knowledge from multiple sources, and summarizing and critiquing different analysis strategies. Students will develop their writing and speaking skills by completing stand-alone tasks, and by coordinating communication tasks with exercises in simultaneously offered theory and econometric classes.

**Requisites:** Concurrent enrollment in A A E 636 and 771**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**A A E 722 – MACHINE LEARNING IN APPLIED ECONOMIC ANALYSIS**

4 credits.

The basic methods, implementation and applications of machine learning for understanding contemporary economic issues using large data sets. Building upon understanding of standard econometric models, the topics include data mining techniques; regression model selection and regularization; post selection inference and economic applications; tree-based methods; neural networks; random forests and casual inference; and unsupervised learning.

**Requisites:** A A E 636 or ECON 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E 723 – PROFESSIONAL DEVELOPMENT SEMINAR**

1 credit.

Professional development for applied economists in sequential contexts. Examples include understanding and preparing for the professional economist job market; preparing and packaging job search materials; technical and non-technical interactions with potential employers and clients; understanding leadership styles and exploring leadership potential; examining professional ethics and norms; and gaining exposure to trends in professional development. Students will develop career skills by completing stand-alone activities, and by coordinating soft skill development tasks with exercises in simultaneously or previously offered theory and econometric classes.

**Requisites:** A A E 721**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E 724 – PRACTICUM FOR APPLIED ECONOMISTS**

4 credits.

One part of a series of courses to train students in the quantitative methods typically used by economic analysts in a professional setting. Provides students with the opportunity to synthesize the material they've learned in their coursework in a start-to-finish econometric analysis similar in scope and timeline to what they often would be expected to do in a professional setting. The final course product is a professional report. Students should think of this report as a professional analyst's Master's thesis - a demonstration of the student's training and capability for professional work, to be shared with prospective employers.

**Requisites:** A A E 637**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**A A E 730 – FRONTIERS IN DEVELOPMENT ECONOMICS 1**

3 credits.

Theory and empirical evidence on growth and development in low-income countries. Topics may include: measurement of poverty and inequality, risk and insurance, social networks, technology adoption, education, corruption, institutions, and behavioral economics.

**Requisites:** ECON 709 and 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**A A E 731 – FRONTIERS IN DEVELOPMENT ECONOMICS 2**

3 credits.

Theory and evidence on growth and development in emerging economies, with primary focus on globalization, trade, labor markets and human capital. We use open-economy general equilibrium models to examine welfare implications of global shocks and domestic economic policies.

**Requisites:** ECON 709 and 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**A A E 737 – APPLIED ECONOMETRIC ANALYSIS III**

3 credits.

Prepares students for their own empirical work by examining contemporary econometric techniques as they are used in development, environment and natural resources, and agricultural economics. Guides students through a selection of applied models using past and current research as examples. By hearing lectures and working through papers, problem sets, replication exercises, and/or research projects, students will develop a deeper understanding of the many facets of empirical research in economics.

**Requisites:** ECON 709 and 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**A A E 746 – FRONTIERS IN AGRICULTURAL ECONOMICS 1**

3 credits.

Economics of agricultural technology innovation and adoption, properties and measurement of production and productivity, and impact evaluation. Empirical methods, including surveys, experiments, randomized trials, and instrumental variable methods of testing applied microeconomic models.

**Requisites:** ECON 709 and 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016

**A A E/ECON 747 – FRONTIERS IN AGRICULTURAL ECONOMICS 2**  
3 credits.

Organization, design, and performance of food and agricultural markets. Industrial organization; firm boundaries, contracting, and collective action; spatial, temporal, and quality dimensions of market design.

**Requisites:** ECON 709 and 711

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**A A E 760 – FRONTIERS IN ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS 1**  
3 credits.

Economic tools and principles pertaining to the optimal management of natural resources. Theoretical models characterize efficient resource use and predict management decisions under different institutional settings. Empirical applications relate to public and private management of forests, fish, wildlife, minerals, and energy resources. Examples highlight the importance of discount rates, property rights, and government policies.

**Requisites:** ECON 709 and 711

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E 762 – FRONTIERS IN ENVIRONMENTAL AND NATURAL RESOURCE ECONOMICS 2**  
3 credits.

The role of markets and government in the allocation of environmental goods and services. Topics include public goods, externalities and market failure; policy instruments for dealing with environmental quality problems such as air pollution; and distributional impacts of environmental regulations.

**Requisites:** ECON 709 and 711

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**A A E 770 – INTRODUCTION TO QUANTITATIVE METHODS IN RESOURCE AND ENERGY ECONOMICS**  
3 credits.

The fundamental mathematics and statistics necessary for the study of quantitative methods in resource and energy demand. Topics include the mathematics of optimization and its role in basic welfare theory and consumer demand; linear and matrix algebra and their application in both modeling consumer behavior and the statistical analysis of models; and the fundamentals of statistical analysis relevant to econometric analysis of resource and energy demand, including probability theory, sampling distributions, and statistical inference.

**Requisites:** Declared in the Resource and Energy Demand Analysis program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**A A E 771 – MICROECONOMICS OF RESOURCES AND ENERGY: THEORY TO PRACTICE**  
3 credits.

Applying economic theory to the practice of resource and energy demand analysis. Topics include consumer demand theory and the proper modeling of demand systems, theoretical underpinnings of behavioral economics, welfare theory, cost benefit analysis and cost-effectiveness analysis, and technology adoption and diffusion.

**Requisites:** Declared in the Resource and Energy Demand Analysis program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**A A E 772 – APPLIED ECONOMETRICS OF RESOURCE AND ENERGY DEMAND**  
4 credits.

The estimation of the economic models of resource and energy demand, including evaluation of energy and resource programs, estimating demand systems in the study of dynamic pricing models, estimating discrete choice models, forecasting resource and energy demand from econometric models, and topics in the application of big-data analytics in resource and energy demand analysis.

**Requisites:** A A E 636 and declared in Agricultural Applied Economics: Resource and Energy Demand Analysis

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**A A E 773 – SEMINAR IN RESOURCE AND ENERGY DEMAND ANALYSIS**  
1-2 credits.

Current issues in resource and demand analysis, with presentations by academic researchers and industry professionals, to introduce students to current issues in resource and demand analysis, and to develop their critical thinking about addressing these issues.

**Requisites:** Declared in the Resource and Energy Demand Analysis program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**A A E 774 – PRACTICUM IN RESOURCE AND ENERGY DEMAND ANALYSIS I**  
1 credit.

The first in a 2-course sequence that comprises the capstone course in Resource and Energy Demand Analysis, in which students synthesize their training in a simulated "real world" analysis. The course is designed to reflect the full range of professional responsibilities of a resource/energy demand analyst, from data retrieval/cleaning to analysis to reporting.

**Requisites:** A A E 636 and declared in Agricultural Applied Economics: Resource and Energy Demand Analysis

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**A A E 776 – PRACTICUM IN RESOURCE AND ENERGY DEMAND ANALYSIS II**

3 credits.

The second in a 2-course sequence that comprises the capstone course in Resource and Energy Demand Analysis, in which students synthesize their training in a simulated "real world" analysis. The course is designed to reflect the full range of professional responsibilities of a resource/energy demand analyst, from data retrieval/cleaning, to analysis, to reporting.

**Requisites:** A A E 772 and declared in Agricultural Applied Economics: Resource and Energy Demand Analysis

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**A A E 777 – SURVEY AND SAMPLE DESIGN IN APPLIED ECONOMICS**

2 credits.

Teaches generation and use of survey data. Topics include identification of target population, random, stratified, cluster sampling, power analysis, survey collection implementation, retrospective and prospective surveys of respondent choice, experimental choice in survey design, and econometric modeling of respondent choices.

**Requisites:** Declared in the Resource and Energy Demand Analysis program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**A A E 780 – RESEARCH COLLOQUIUM**

3 credits.

For AAE Ph.D. students to develop a dissertation proposal. Working in groups and with some additional feedback from individual advisors. Developing research questions, literature search, word models, math models, testable hypotheses, identification strategies. Working with data, using LATEX, giving presentations. Peer review of weekly assignments. Developing cohort for subsequent feedback through dissertation writing and job search.

**Requisites:** Declared in Agricultural Applied Economics, Ph.D.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 799 – PRACTICUM IN AGRICULTURAL AND APPLIED ECONOMICS TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**A A E/POLI SCI 835 – GAME THEORY AND POLITICAL ANALYSIS**

3 credits.

An introduction to the tools of game theoretic analysis, with reference to the use of game theory in political science. Intended for those desiring a basic familiarity with the theory, and for those planning further work in formal modeling.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A A E 875 – SPECIAL TOPICS**

1-4 credits.

Special topics on contemporary issues relevant to agricultural and applied economics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**A A E/ENVIR ST/POP HLTH/PUB AFFR 881 – BENEFIT-COST ANALYSIS**

3 credits.

Presents the welfare economics underpinnings for evaluating the social benefits and costs of government activities. Issues such as uncertainty, the social discount rate, and welfare weights will be discussed; case studies from the environmental, social policy, and agricultural areas will be studied.

**Requisites:** Graduate/professional standing and (PUB AFFR 818 and 880), or I SY E/POP HLTH/I SY E 875, or A A E 635

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A A E/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/POLI SCI/PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**A A E 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research and writing to complete dissertation requirement.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**A A E 999 – SPECIAL WORK - AGRICULTURAL AND APPLIED ECONOMICS**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## AGROECOLOGY (AGROECOL)

**AGROECOL/AGRONOMY/C&E SOC/ENTOM/ENVIR ST 103 – AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE**

3 credits.

Agroecology has blossomed across the world in recent decades as not only a science, but also a practice, and a movement. Employ the multiple disciplines and perspectives that Agroecology affords to analyze our agricultural and food systems within a broader context of dynamic social and ecological relationships.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGROECOL/AGRONOMY/DY SCI 371 – MANAGED GRAZING FIELD STUDY**

1-2 credits.

For those interested in developing a comprehensive understanding of the principles, practices, and conservation potential of managed grazing systems, and how these farming systems may contribute to the sustainability and diverse tapestry of Wisconsin's working landscape. Visit managed grazing systems of successful grazing-based farmers (graziers) across southern/central counties in Wisconsin, and/or research sites at UW's Arlington and/or Lancaster Research Stations and/or the Discovery Farms Program. An opportunity to discuss at length with farm managers and researchers the practices in place at each farm and research site. Includes introduction to UWEX pasture forage/nutrient management planning and budgeting software.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**AGROECOL 400 – STUDY ABROAD IN AGROECOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**AGROECOL 699 – SPECIAL PROBLEMS**

1-3 credits.

Scholarship on special topics, under the supervision of an agroecology faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**AGROECOL 701 – THE FARM AS SOCIO-ENVIRONMENTAL ENDEAVOR**

3 credits.

Farms may be analyzed as intentional entities shaped by the contexts in which they must operate. This course explores how these biophysical and social contexts both exert constraints and provide opportunities, leading to the diversity of farms observed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGROECOL 702 – THE MULTIFUNCTIONALITY OF AGRICULTURE**

3 credits.

Agroecology systems provide a variety of social, economic, and ecological functions to society, each with a different network of stakeholders. This course explores methods of evaluating these diverse functions and perspectives, with a special focus on participatory approaches.

**Requisites:** Declared in Agroecology MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AGROECOL 710 – AGROECOLOGY SEMINAR**

1 credit.

Weekly seminar on topics in agroecology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**AGROECOL 720 – AGROECOLOGY FIELD STUDY**

1-3 credits.

Field study of farms, processing, marketing, distribution, and policy-making in the food system. Courses will be several days of visits, discussions with the operators, and student-faculty discussion sections. Presentations or written reports may be required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGROECOL/AGRONOMY/ENVIR ST 724 – AGROECOSYSTEMS AND GLOBAL CHANGE**

3 credits.

Impacts of global change drivers (climate change, atmospheric chemistry, bioenergy, urbanization, policy) on agroecosystems and their associated goods and services; environmental impacts of agricultural land use and feedbacks to climate; modeling approaches; critical review of current scientific literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**AGROECOL 875 – TOPICS IN AGROECOLOGY**

1-3 credits.

This course number provides for opportunities to develop and test possible new courses, or to accommodate visiting scholars who may wish to offer a course.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**AGROECOL 990 – RESEARCH**

1-12 credits.

Independent research on the student's thesis or degree project.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AGRONOMY (AGRONOMY)****AGRONOMY 100 – PRINCIPLES AND PRACTICES IN CROP PRODUCTION**

4 credits.

Plant science applied to the growth, production, management, distribution and utilization of field crops.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGRONOMY/AGROECOL/C&E SOC/ENTOM/ENVIR ST 103 – AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE**

3 credits.

Agroecology has blossomed across the world in recent decades as not only a science, but also a practice, and a movement. Employ the multiple disciplines and perspectives that Agroecology affords to analyze our agricultural and food systems within a broader context of dynamic social and ecological relationships.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGRONOMY/ENTOM/NUTR SCI 203 – INTRODUCTION TO GLOBAL HEALTH**

3 credits.

Introduces students to global health concepts through multidisciplinary speakers dedicated to improving health through their unique training. It targets students with an interest in public health and those who wish to learn how their field impacts their global issues.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGRONOMY 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work under direct guidance of an Agronomy faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions



**AGRONOMY 299 – INDEPENDENT STUDY**

1-3 credits.

Research work under direct guidance of a faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AGRONOMY 300 – CROPPING SYSTEMS**

3 credits.

Agronomic cropping systems of the Midwest: environmental impacts, productivity, and profitability. Cropping system diversification and sustainable agriculture. An agroecological approach, the application of ecological concepts and principles for the improvement of cropping systems is emphasized.

**Requisites:** AGRONOMY 100 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AGRONOMY 302 – FORAGE MANAGEMENT AND UTILIZATION**

3 credits.

Establishment, management, harvesting and utilization of forage crops for use as hay, pasture and silage. Emphasis on cool season perennial grasses and legumes.

**Requisites:** Junior standing and (AN SCI/DY SCI/AN SCI 101, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, AGRONOMY 100, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AGRONOMY/HORT/SOIL SCI 326 – PLANT NUTRITION MANAGEMENT**

3 credits.

Functions, requirements and uptake of essential plant nutrients; chemical and microbial processes affecting nutrient availability; diagnosis of plant and soil nutrient status; fertilizers and efficient fertilizer use in different tillage systems.

**Requisites:** (CHEM 103, 109, or 115 and ENVIR ST/GEOG/SOIL SCI/ENVIR ST/GEOG 230) or SOIL SCI 301, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AGRONOMY/HORT 338 – PLANT BREEDING AND BIOTECHNOLOGY**

3 credits.

Principles of transferring plant genes by sexual, somatic, and molecular methods and the application of gene transfer in plant breeding and genetic engineering to improve crop plants.

**Requisites:** (BIOLOGY/BOTANY/BIOLOGY 130, GENETICS 466, 467, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AGRONOMY/BOTANY/HORT 339 – PLANT BIOTECHNOLOGY: PRINCIPLES AND TECHNIQUES I**

4 credits.

Theoretical and practical training in plant biotechnology including molecular biology, protein biochemistry and basic bioinformatic techniques used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOLOGY/ZOOLOGY/BIOLOGY 102) and (CHEM 104, 109, or 116) or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**AGRONOMY/BOTANY/HORT 340 – PLANT CELL CULTURE AND GENETIC ENGINEERING**

3 credits.

Presents an overview of the techniques, biology and underlying theory of plant tissue culture, genetic engineering and genome editing. Overviews of research and commercial applications, and issues/challenges in the area of plant biotechnology are also covered.

**Requisites:** (BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 102, or BIOCORE 381) and (CHEM 104, 109, or 116), or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGRONOMY/A A E/NUTR SCI 350 – WORLD HUNGER AND MALNUTRITION**

3 credits.

Hunger and poverty in developing countries and the United States. Topics include: nutrition and health, population, food production and availability, and income distribution and employment.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AGRONOMY/ENTOM/HORT/PL PATH/SOIL SCI 354 – DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF FIELD CROPS**

1 credit.

Provides students with information necessary to diagnosis and monitor corn, soybean, alfalfa and wheat for pests (insects, weeds, diseases) and nutrient deficiency symptoms including perspectives from Agronomy, Entomology, Horticulture, Plant Pathology and Soil Science. Proper soil and pest sampling information will be provided as will proper cropstaging techniques which are essential for pest and nutrient management.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2019**AGRONOMY/HORT 360 – GENETICALLY MODIFIED CROPS: SCIENCE, REGULATION & CONTROVERSY**

2 credits.

Explores how and why genetically modified (GM) crops are created and their regulation at the federal and state level. Through case studies, students will learn about the impacts of GM crops and critically evaluate arguments both for and against their use. Readings and discussion introduce students to the complex economic, cultural, and political issues surrounding GM crops.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, GENETICS 466, or GENETICS 467**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AGRONOMY/A A E/HORT/PL PATH 367 – INTRODUCTION TO ORGANIC AGRICULTURE: PRODUCTION, MARKETS, AND POLICY**

3 credits.

Provides an in-depth understanding of the history of organic agriculture, its production, processing, marketing, and social dimensions, and its impact on environmental, community, and human health.

**Requisites:** AGROECOL/AGRONOMY/CE SOC/ENTOM/ENVIR ST/ AGROECOL/AGRONOMY/C&E SOC/ENTOM 103 or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AGRONOMY/BOTANY/SOIL SCI 370 – GRASSLAND ECOLOGY**

3 credits.

Understand factors driving global, continental, regional, and local distribution of grasslands. Discuss how management affects provision of grassland ecosystem goods and services. Compare and contrast plant community and ecosystem dynamics in native prairie and intensively managed pastures.

**Requisites:** BOTANY/PL PATH/BOTANY 123, BIOLOGY/BOTANY/BIOLOGY 130, ENVIR ST/SOIL SCI/ENVIR ST 101, ATM OCN/SOILSCI 132, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONOMY 100, or graduate/professional standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGRONOMY/AGROECOL/DY SCI 371 – MANAGED GRAZING FIELD STUDY**

1-2 credits.

For those interested in developing a comprehensive understanding of the principles, practices, and conservation potential of managed grazing systems, and how these farming systems may contribute to the sustainability and diverse tapestry of Wisconsin's working landscape. Visit managed grazing systems of successful grazing-based farmers (graziers) across southern/central counties in Wisconsin, and/or research sites at UW's Arlington and/or Lancaster Research Stations and/or the Discovery Farms Program. An opportunity to discuss at length with farm managers and researchers the practices in place at each farm and research site. Includes introduction to UWEX pasture forage/nutrient management planning and budgeting software.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017

**AGRONOMY 375 – SPECIAL TOPICS**

1-4 credits.

Special topics on issues relevant to Agronomy.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AGRONOMY/HORT 376 – TROPICAL HORTICULTURAL SYSTEMS**

2 credits.

Highlights the connections between tropical plants and society. Topics include multidisciplinary reflections on the biology of tropical plants, as well as an overview of different production systems and some of the social and environmental problems associated with the utilization of tropical plants in the context of local and global markets. Provides the opportunity to demonstrate comparative skills with respect to local and international challenges posed by the topics we address in class. Illustrates connections between horticulture and conservation, food security, nutrition, and global health.

**Requisites:** Junior standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AGRONOMY 377 – GLOBAL FOOD PRODUCTION AND HEALTH**

3 credits.

Crops, food, and cropping systems from different parts of the world and their impact on global sustainability and health. Introduction to crop biology, environmental requirements, and agronomic production practices of major food crops. Environmental, socioeconomic, and health impacts of farming systems and how to assess their sustainability. For those with broad interests in global issues, agroecology, food, environment, health, and agriculture.

**Requisites:** ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151, ZOOLOGY/BIOLOGY/ZOOLOGY 101, BOTANY/BIOLOGY/BOTANY 130, BIOCORE 381, HORT 120, AGRONOMY 100, AGRONOMY/AGROECOL/CE SOC/ENTOM/ENVIR ST/AGROECOL/AGRONOMY/C&E SOC/ENTOM 103, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AGRONOMY 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Agronomy and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Workplace – Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AGRONOMY 400 – STUDY ABROAD IN AGRONOMY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**AGRONOMY/DY SCI 471 – FOOD PRODUCTION SYSTEMS AND SUSTAINABILITY**

3 credits.

Delves into aspects of natural sciences (biology and agricultural sciences) and social sciences underpinning the assessment of food production systems as related to a variety of outcomes including but not restricted to human and environmental health, air and water quality, greenhouse gases emission, land use, economic opportunity, social justice, as well as mitigation and adaptation to climate change, locally, regionally, domestically, across continents, and globally.

**Requisites:** (Graduate/professional standing) or junior standing and satisfied Quantitative Reasoning (QR) B requirement**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**AGRONOMY 500 – SENIOR CAPSTONE EXPERIENCE**

2 credits.

A stepping stone between the classroom and society. Emphasizes discussion and activities for enhancing integration of diverse bodies of knowledge, critical thinking, and effective written and oral communication.

**Requisites:** Senior standing only**Repeatable for Credit:** No**Last Taught:** Spring 2023

**AGRONOMY/HORT 501 – PRINCIPLES OF PLANT BREEDING**

3 credits.

Principles involved in breeding and maintaining economic crops; factors affecting the choice of breeding methods; alternative approaches through hybridization and selection.

**Requisites:** (GENETICS 466 or 467) and (BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGRONOMY/HORT 502 – TECHNIQUES OF PLANT BREEDING**

1 credit.

Lab and field techniques used in breeding and maintaining economic crops.

**Requisites:** (GENETICS 466 or 467) and (BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**AGRONOMY/ATM OCN/SOIL SCI 532 – ENVIRONMENTAL BIOPHYSICS**

3 credits.

Plant-environment interactions with particular reference to energy exchanges and water relations. Models are used to provide a quantitative synthesis of information from plant physiology, soil physics, and micrometeorology with some consideration of plant-pest interactions. Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.

**Requisites:** BOTANY/BIOLOGY/BOTANY 130 and (MATH 211, 217, 221 or 275) and (PHYSICS 103, 201, 207, or 247), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGRONOMY/C&E SOC/MED HIST/PHILOS 565 – THE ETHICS OF MODERN BIOTECHNOLOGY**

3 credits.

An in-depth study of a selection of ethical issues arising from the application of modern biotechnology to microorganisms, plants, non-human animals, and human beings. We will aim at a discussion that is informed by empirical research and by work done in ethical theory, political philosophy, and other relevant disciplines, and whose character is rigorous, clear, nuanced, and unbiased.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AGRONOMY/AN SCI/GENETICS/HORT 615 – GENETIC MAPPING**

3 credits.

Computing-intensive course to prepare students for genetic mapping research; linkage analysis and QTL mapping in designed crosses; linkage disequilibrium and association analysis (GWAS). Recommended preparation is undergraduate courses in genetics and statistics and prior experience writing R scripts (such as module 1 of STAT 327).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AGRONOMY/ENTOM/F&W ECOL/M&ENVTOX 632 – ECOTOXICOLOGY: THE CHEMICAL PLAYERS**

1 credit.

Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment.

**Requisites:** (CHEM 341 or 343) and ((BIOLOGY/BOTANY/BIOLOGY 130 and BIOLOGY/ZOOLOGY/BIOLOGY 102) or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 383); or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**AGRONOMY/ENTOM/F&W ECOL/M&ENVTOX 633 – ECOTOXICOLOGY: IMPACTS ON INDIVIDUALS**

1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates).

**Requisites:** AGRONOMY/ENTOM/F&W ECOL/M&ENVTOX/ AGRONOMY/ENTOM/F&W ECOL 632

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **AGRONOMY/ENTOM/F&W ECOL/M&ENVTOX 634 – ECOTOXICOLOGY: IMPACTS ON POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

1 credit.

Focuses on the impact of toxicants on populations, communities, ecosystems, and includes risk evaluation. Includes lectures, current research presentations, and discussions.

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/ AGRONOMY/ENTOM/F&W ECOL 633 or declared in Molecular and Environmental Toxicology, PhD program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **AGRONOMY 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Agronomy Honors degrees.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **AGRONOMY 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member. Requires consent of supervising instructor. Continuation of AGRONOMY 681. Enrolled in CALS Honors Program.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2009

### **AGRONOMY 699 – SPECIAL PROBLEMS**

1-4 credits.

Independent research guided by an Agronomy faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **AGRONOMY/AGROECOL/ENVIR ST 724 – AGROECOSYSTEMS AND GLOBAL CHANGE**

3 credits.

Impacts of global change drivers (climate change, atmospheric chemistry, bioenergy, urbanization, policy) on agroecosystems and their associated goods and services; environmental impacts of agricultural land use and feedbacks to climate; modeling approaches; critical review of current scientific literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **AGRONOMY 771 – EXPERIMENTAL DESIGNS**

1 credit.

Review of methods for controlling error in research experiments; review and in-depth development of factorial treatment designs; theory, analysis, and examples of advanced experimental designs for plant and animal research. Knowledge of statistics such as STAT/F&W ECOL/HORT 571 is strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **AGRONOMY 772 – APPLICATIONS IN ANOVA**

1 credit.

Development of models, programs, inferences, and interpretations of analysis of variance in biological research; mixed vs. random effects models and their development; choosing the correct inference range; variance and covariance analyses; repeated measures; dealing with missing data; SAS programming. Knowledge of statistics such as STAT/F&W ECOL/HORT 571 is strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **AGRONOMY 799 – PRACTICUM IN AGRONOMY TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **AGRONOMY/HORT 811 – BIOMETRICAL PROCEDURES IN PLANT BREEDING**

3 credits.

Use of statistical methods to facilitate improvements in quantitative traits of cultivated plants.

**Requisites:** Graduate/professional standing and FW ECOL/HORT/STAT/F&W ECOL/HORT 572

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**AGRONOMY/HORT 812 – SELECTION THEORY FOR QUANTITATIVE TRAITS IN PLANTS**

2 credits.

Discuss advanced topics in selection theory and the utilization of molecular markers in selection.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**AGRONOMY 875 – SPECIAL TOPICS**

1-4 credits.

Special topics on issues relevant to Agronomy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AGRONOMY 920 – SEMINAR**

1 credit.

Weekly seminar topics in agronomy and horticulture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/F&W ECOL/ GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AGRONOMY/GENETICS/HORT 957 – SEMINAR-PLANT BREEDING**

1 credit.

Graduate seminar in Plant Breeding Plant Genetics (PBPG) that requires students to give oral scientific presentations on topics chosen by the instructors and/or the student's thesis research. This seminar is coordinated by PBPG faculty on a rotating basis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AGRONOMY 990 – RESEARCH**

1-9 credits.

Independent writing and research to complete thesis or dissertation requirements.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## AIR FORCE AEROSPACE STUDIES (A F AERO)

**A F AERO 101 – HERITAGE AND VALUES I**

1 credit.

An introduction to the Air Force (AF), potential careers, and role of the United States Air Force today. Examine general aspects of the Department of the Air Force, AF Leadership, AF benefits, and opportunities for AF officers. Provides the foundation for becoming an Airman by outlining our heritage and values, as well as a historical perspective such as lessons on war and US military, AF operations, principles of war, and airpower. Gain a knowledge-level understanding for the employment of air and space power, from an institutional, doctrinal, and historical perspective.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**A F AERO 102 – HERITAGE AND VALUES II**

1 credit.

Continuation of A F AERO 101. An introduction to the Air Force (AF), potential careers, and role of the United States Air Force today. Examine general aspects of the Department of the Air Force, AF Leadership, AF benefits, and opportunities for AF officers. Provides the foundation for becoming an Airman by outlining our heritage and values, as well as a historical perspective such as lessons on war and US military, AF operations, principles of war, and airpower. Gain a knowledge-level understanding for the employment of air and space power, from an institutional, doctrinal, and historical perspective.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**A F AERO 201 – TEAM AND LEADERSHIP FUNDAMENTALS I**

1 credit.

Provides a fundamental understanding of leadership and team building. Discover the many layers to Air Force leadership, such as understanding oneself, listening to others, and being a good follower. Apply these leadership perspectives when completing team building activities and discussing topics such as Full Range Leadership, Problem Solving, and Motivation. Demonstrate basic verbal and written communication skills.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**A F AERO 202 – TEAM AND LEADERSHIP FUNDAMENTALS II**

1 credit.

Continuation of A F AERO 202. Provides a fundamental understanding of leadership and team building. Discover the many layers to Air Force leadership, such as understanding oneself, listening to others, and being a good follower. Apply these leadership perspectives when completing team building activities and discussing topics such as Full Range Leadership, Problem Solving, and Motivation. Demonstrate basic verbal and written communication skills.

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A F AERO 301 – LEADING PEOPLE AND EFFECTIVE COMMUNICATION I**

3 credits.

Provides a fundamental understanding of leadership. Learn about the leadership process with its complex interaction among leaders, followers and circumstances. Focus on developing intermediate to advanced verbal and written communication skills. Cadets apply knowledge in leadership laboratories and other cadet wing activities.

**Requisites:** A F AERO 202**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**A F AERO 302 – LEADING PEOPLE AND EFFECTIVE COMMUNICATION II**

3 credits.

Continuation of A F AERO 301. Provides a fundamental understanding of leadership. Learn about the leadership process with its complex interaction among leaders, followers and circumstances. Focus on developing intermediate to advanced verbal and written communication skills. Cadets apply knowledge in leadership laboratories and other cadet wing activities. Demonstrate intermediate to advanced verbal and written communication skills.

**Requisites:** A F AERO 301**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A F AERO 401 – NATIONAL SECURITY AFFAIRS**

3 credits.

Provides a fundamental understanding of National Security Strategy and the organization of the Department of Defense. Introduces strategic-level thinking by exploring the various domains in which the Air Force operates. Discuss joint operations and the integration of air, space, land and sea forces. Demonstrate intermediate to advanced verbal and written communication skills.

**Requisites:** A F AERO 302**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**A F AERO 402 – LEADERSHIP RESPONSIBILITIES & COMMISSIONING PREPARATION**

3 credits.

Prepares cadets for life as Second Lieutenants. Covers various human resources topics to prepare each future officer for mid- to upper-level management positions, including evaluation systems, supervision and counseling, and annual training requirements. Become familiar with a myriad of officer responsibilities that they will incur upon joining the Active Duty community. Demonstrate intermediate to advanced verbal and written communication skills.

**Requisites:** A F AERO 401**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**A F AERO 501 – LEADERSHIP LABORATORY I**

1 credit.

Apply officer education training and serve as an orientation to Air Force procedures, leadership roles, and other topics dealing with the professional development of future Air Force Officers.

**Requisites:** Member of Air Force Reserve Officer Training Corps (AFROTC)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**A F AERO 502 – LEADERSHIP LABORATORY II**

1 credit.

Apply leadership training and orient to Air Force procedures, leadership roles, and other topics dealing with the professional development of future Second Lieutenants.

**Requisites:** Member of Air Force Reserve Officer Training Corps (AFROTC)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## AMERICAN INDIAN STUDIES (AMER IND)

**AMER IND 100 – INTRODUCTION TO AMERICAN INDIAN STUDIES**

3 credits.

Focus is history, social organization, political experience, artistic expression of North American Indians, using methods and materials from a number of disciplines as an introduction to the interdisciplinary field.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**AMER IND/AFROAMER/ASIAN AM/CHICLA/FOLKLORE 102 – INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES**

3 credits.

Introduction to comparative ethnic studies, examining race, ethnicity, and indigeneity within the United States. Includes perspectives from African American, American Indian, Asian American, and Chican@ and Latin@ studies.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AMER IND/ENGL 172 – LITERATURES OF NATIVE AMERICA**

3 credits.

Introduction to the oral and written literatures of the peoples of native North America. An engagement with texts across historical periods, tribal groups, and regions to examine forms such as oratory, sermon, testimony, autobiography, and contemporary poetry and novels.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AMER IND/HISTORY 190 – INTRODUCTION TO AMERICAN INDIAN HISTORY**

3-4 credits.

A broad survey of American Indian history which centers Indigenous peoples, communities, and nations in the context of U.S. policy and culture that emphasizes decolonial methods and Native ways of knowing the past.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AMER IND 199 – DIRECTED STUDY**

1-3 credits.

Independent study for freshmen and sophomores in collaboration with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2009**AMER IND/ENGL 246 – LITERATURE BY AMERICAN INDIAN WOMEN**

3 credits.

Presents a broad range of literatures from diverse Native traditions and eras, to provide students with a basic knowledge of major issues affecting and best-known texts by American Indian women authors.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**AMER IND 250 – INDIANS OF WISCONSIN**

3 credits.

Introduction to the various American Indian Nations within Wisconsin's borders with an emphasis on their history, culture, and sovereignty. Examines individual tribes and bands as well as common issues that affect tribal and non-tribal people in Wisconsin.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**AMER IND 301 – FIRST SEMESTER OJIBWE**

3 credits.

Introduction to the Ojibwe language, spoken and written, with emphasis on oral tradition and extensive study of grammar.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Frng Lang - 1st semester language course

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND 302 – SECOND SEMESTER OJIBWE**

3 credits.

Continuation of Ojibwe language study, with an emphasis on traditional winter cycle myths.

**Requisites:** AMER IND 301**Course Designation:** Breadth - Humanities

Frng Lang - 2nd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**AMER IND 303 – BEGINNER LEVEL INDIGENOUS LANGUAGE**

3 credits.

Gain an understanding of the grammatical and cultural features of an Indigenous language. Includes exploration of cultural practices and values through the study of oral and written narrative.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**AMER IND 304 – BEGINNER LEVEL INDIGENOUS LANGUAGE II**

3 credits.

Focus on proficiency in reading, speaking, and writing of an Indigenous language. Includes exploration of cultural practices and values through the study of oral and written narrative.

**Requisites:** AMER IND 303**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AMER IND/ENVIR ST 306 – INDIGENOUS PEOPLES AND THE ENVIRONMENT**

3 credits.

Indigenous peoples often have very close relationships to ancestral homelands, species and natural resources. However, definitions of "indigenous" can be controversial and highly politicized. Diverse outlooks on identities, worldviews and environmental governance clarify the complex meanings of indigeneity in the US. Highlights American Indian perspectives, conservation practices, and policy environments through consideration of US and international case studies. American Indian experiences shed light on pressing issues of resource sustainability and sovereignty, and demonstrate linkages to global Indigenous environmental issues and strategies.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND 308 – BEGINNER LEVEL HOOCAC/HO-CHUNK LANGUAGE**

3 credits.

Provides an instruction to the Hoocak language (Ho-Chunk, formerly referred to as the Wisconsin Winnebago). Hoocak is one of the five aboriginal languages spoken in the state of Wisconsin and part of a larger Souian language family found only in North America. Learn the sounds and writing system of the language and examine the associated grammar and vocabulary. Develop literacy and an understanding of the unique sentence and verb structures, and utilize basic introductory conversational skills currently being used among Hoocak speakers.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND/ANTHRO 314 – INDIANS OF NORTH AMERICA**

3 credits.

Description and analysis of native cultures, and the role of environmental and historical factors in North America.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**AMER IND 320 – NATIVE PEOPLES OF THE SOUTHWEST**

3 credits.

Overview of Indian Peoples and cultures of the "Southwest" from historic times to present, including discussion of contemporary issues impacting tribes in the southwestern United States.

**Requisites:** AMER IND 100 or sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**AMER IND 325 – AMERICAN INDIANS IN FILM**

3 credits.

A critical examination of the portrayal of the American Indian in film, including documentaries and films made by Native filmmakers.

**Requisites:** AMER IND 100 or COM ARTS 350**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**AMER IND/CSCS 330 – AMERICAN INDIAN COMMUNITIES: SOVEREIGNTY, STRUGGLES, AND SUCCESSES**

3 credits.

Learn about contemporary Native communities, both domestically and globally, through a carefully curated selection of readings, podcasts, and videos from Indigenous scholars, community members, knowledge holders, and activists. Offers a broad historical overview of Native American communities in the United States that illustrates the historical trajectory from early colonization and dispossession through self-determination and the recognition of tribal sovereignty in action by local, state, and federal governments.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND/ENVIR ST 341 – INDIGENOUS ENVIRONMENTAL COMMUNICATORS**

3 credits.

Native Nations show leadership globally in addressing major environmental issues. Indigenous languages describe deep relationships with the natural world, including information on environmental stewardship - harvesting, caretaking and reciprocity. Indigenous scholars contribute crucial perspectives to conversations about human relationships to the Earth - cultural relationships to wildlife and plants, and the ethical and practical roles of humans in socio-ecological systems. Focuses on indigenous environmental scholarship, including the ongoing legacy of oral traditions, developing research, writing, and public speaking skills.

**Requisites:** Satisfied Communications A requirement and sophomore standing, or graduate/professional standing**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND/ENVIR ST/GEOG 345 – MANAGING NATURE IN NATIVE NORTH AMERICA**

3 credits.

Surveys the concepts, practices, and issues associated with natural resource management in American Indian communities.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**AMER IND/ANTHRO 354 – ARCHAEOLOGY OF WISCONSIN**

3 credits.

Introduction to the archaeological evidence for the diverse Native American cultures of Wisconsin over the past 12,000 years.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**AMER IND/ART HIST 359 – AMERICAN INDIAN ART HISTORY: CONTEMPORARY ISSUES**

3 credits.

A thematic introduction to contemporary (1960 - present) Native North American art drawing from historic (pre and post-contact) precedents. Topics are generated from the conceptual themes of contact, conflict, exchange, appropriation and re-appropriation of American Indian imagery, materials, and ideas.

**Requisites:** AMER IND 100 or sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2013**AMER IND/LINGUIS 371 – SURVEY OF NORTH AMERICAN INDIAN LANGUAGES**

3 credits.

Overview of native languages of North America, including topics such as history, distribution, diversity, government policy, language endangerment, elaboration of cultural domains, language and worldview, speech styles, language structure (phonology, morphology, grammatical categories), performance (narrative, song), writing systems.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AMER IND 401 – OJIBWE LANGUAGE III**

3 credits.

Represents the third semester of the Ojibwe language, focusing on word structure and conversational skills.

**Requisites:** AMER IND 302**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019

**AMER IND 402 – OJIBWE LANGUAGE IV**

3 credits.

Represents the fourth semester in the Ojibwe language, focusing on conversational skills.

**Requisites:** AMER IND 401

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**AMER IND 403 – INTERMEDIATE LEVEL INDIGENOUS LANGUAGE**

3 credits.

Build on elementary skills of a specific indigenous language. Advanced grammar and syntax; advanced conversation and composition; cultural background of Indigenous people speaking the language through reading of stories, histories and cultural exploration. Requires completion of AMER IND 304 in the same language.

**Requisites:** Consent of instructor

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AMER IND 404 – INTERMEDIATE LEVEL INDIGENOUS LANGUAGE II**

3 credits.

Build on intermediate skills of a specific indigenous language. Increased focus on developing conversational skills. Requires completion of AMER IND 403 in the same language.

**Requisites:** Consent of instructor

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**AMER IND/GEOG 410 – CRITICAL INDIGENOUS ECOLOGICAL KNOWLEDGES**

3 credits.

Critical Indigenous Ecological Knowledges are a set of diverse understandings, responsibilities, and laws held by distinct groups of Indigenous peoples that are enacted in multiple ways across socio-political and geographical contexts. These knowledges intersect with Indigenous political sovereignties and longstanding, complex, and nuanced relationships to the more-than-human world. Learn multiple entry points to exploring and examining these knowledge sets in the context of what's for now called the U.S. and Canada to think critically about the politics of Nature, environmentalism, race, indigeneity, and colonialism both historically and in the contemporary moment. Reflect upon how critical Indigenous knowledges about ecology, environment, and government have been erased, co-opted, criminalized, and also continually practiced, reimagined, and revitalized in multiple spheres through a range of interdisciplinary, critical, and cutting-edge Native scholarships and writings.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**AMER IND 425 – SPECIAL TOPICS IN AMERICAN INDIAN STUDIES**

3 credits.

Special focus on American Indian thought and perspectives on subjects in the arts and sciences.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AMER IND/ANTHRO/FOLKLORE 431 – AMERICAN INDIAN FOLKLORE**

3 credits.

An introduction to the genres of American Indian Folklore. Special attention is given to creation stories, trickster tales, and the relationship between folklore and historical memory.

**Requisites:** Junior standing and (ANTHRO/AMER IND/ANTHRO 314, FOLKLORE 100, 230, or 320), or graduate/professional standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**AMER IND/ANTHRO/FOLKLORE/GEN&WS 437 – AMERICAN INDIAN WOMEN**

3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AMER IND/LSC 444 – NATIVE AMERICAN ENVIRONMENTAL ISSUES AND THE MEDIA**

3 credits.

Explores public understanding and media coverage of Native American environmental issues including treaty rights, air and water quality, land-into-trust, and sacred sites. Analysis of organizational and structural constraints of media coverage relating to issues of sovereignty and intergovernmental relationships.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**AMER IND 450 – ISSUES IN AMERICAN INDIAN STUDIES**

3 credits.

Special focus on American Indian thought and perspectives on subjects in the arts and sciences.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AMER IND/ANTHRO/BOTANY 474 – ETHNOBOTANY**

3-4 credits.

Study of the interactions between human cultures and plants. Topics include: traditional resource management and agriculture; crop domestication, evolution, and conservation; archaeobotany; indigenous knowledge; folk taxonomy; plants in symbolism and religion; dietary patterns; phytochemistry; global movement of plants and peoples.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Biological Science or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AMER IND/C&E SOC/SOC 578 – POVERTY AND PLACE**

3 credits.

The allocation of economic and social rewards in the United States; emphasis on persistently poor regions and communities; analysis of selected minority groups and their poverty statuses; poverty programs and their consequences for structural and cultural changes.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, or SOC 181

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**AMER IND/SOC WORK 636 – SOCIAL WORK IN AMERICAN INDIAN COMMUNITIES: THE INDIAN CHILD WELFARE ACT**

3 credits.

The role of social workers and social services in American Indian and tribal communities, particularly compliance with the Indian Child Welfare Act. Historical context includes land removal and loss, the boarding school and adoption eras, and social determinants of health including the impacts of historical and intergenerational trauma.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AMER IND 699 – DIRECTED STUDY**

1-3 credits.

Independent study for junior, senior and graduate students in collaboration with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**AMER IND/HISTORY 941 – INDIANS AND EMPIRES**

3 credits.

Examining the centuries of imperial competition in Native America, explores recent developments in early American Indian history.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

## ANATOMY & PHYSIOLOGY (ANAT&PHY)

**ANAT&PHY 235 – HUMAN PHYSIOLOGY AND HEALTH**

4 credits.

Learn basic physiological concepts, apply them to understand human health and disease, and link them to broader core concepts in biology. Complete a project that applies conceptual understanding of general biology and physiology to investigate and create informational materials for the public about a disease or health promotion strategy. The foundational knowledge covered serves those interested in health sciences majors, as well as non-science students interested in life-long health.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANAT&PHY 335 – PHYSIOLOGY**

5 credits.

Core concepts in human physiology from cells to organ-systems via online lectures and active learning activities including laboratory experiments. Topics include homeostasis, membrane transport, cellular physiology, regulation of metabolism, and functions of the nervous, endocrine, muscular, reproductive, cardiovascular, respiratory, renal, and gastrointestinal system.

**Requisites:** Sophomore standing, (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153 or BIOCORE 381) and (CHEM 103, 108, 109 or 115), or graduate/professional standing. Not open to students with credit for PHYSIOL 435 or ANAT&PHY 435

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANAT&PHY 337 – HUMAN ANATOMY**

3 credits.

Uses a regional approach to provide a foundation of knowledge in human anatomy. Units cover an introduction to anatomical systems; back and limbs; thorax, abdomen, and pelvis; and head and neck.

**Requisites:** Not open to first-year freshman students

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANAT&PHY 338 – HUMAN ANATOMY LABORATORY**

2 credits.

Takes a regional approach to cover the gross anatomy of the human body in four units: introduction to anatomical systems; back and limbs; thorax, abdomen, and pelvis; and head and neck. A variety of tools, including interactive software, models, and specimens, will be used.

**Requisites:** ANAT&PHY 337 (KINES 337 before fall 2018), or ANATOMY/KINES 328, or concurrent enrollment

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANAT&PHY 399 – INDEPENDENT STUDY**

1-3 credits.

Individual work in the fields of anatomy and/or physiology offers the opportunity to participate in more in-depth study (beginning to intermediate level) under the direct guidance of anatomy and/or physiology faculty.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANAT&PHY 435 – FUNDAMENTALS OF HUMAN PHYSIOLOGY**

5 credits.

Explores the major organ systems including nervous, endocrine, muscular, cardiovascular, renal, and gastrointestinal. The main learning objective is an understanding of the cellular and molecular mechanisms through which homeostasis is integrated and maintained. Not open to students with credit for PHYSIOL 335 or 435 prior to fall 2018 or ANAT&PHY 335

**Requisites:** Junior standing, (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), (CHEM 103, 108, 109, or 115) and (PHYSICS 103, 201, or 207) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANAT&PHY 699 – INDEPENDENT STUDY**

1-3 credits.

Individual work in the fields of anatomy and/or physiology will offer the opportunity to participate in more in-depth study (advanced level) under the direct guidance of anatomy and/or physiology faculty.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ANATOMY (ANATOMY)****ANATOMY 329 – HUMAN ANATOMY-KINESIOLOGY**

2 credits.

Laboratory with dissection of human cadaver specimens and study of prosections.

**Requisites:** ANAT&PHY 338**Repeatable for Credit:** No**Last Taught:** Spring 2017**ANATOMY 622 – HUMAN ANATOMY FOR PHYSICAL AND OCCUPATIONAL THERAPY STUDENTS**

6 credits.

Dissection-based gross human anatomy relevant with a physical and occupational therapy focus. Special emphasis is placed on the musculoskeletal and peripheral nervous systems, and living subject and surface anatomy.

**Requisites:** Declared in Doctor of Physical Therapy Program or Occupational Therapy OTD Program**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ANATOMY 699 – INDEPENDENT STUDY**

1-4 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2019**ANESTHESIOLOGY  
(ANESTHES)****ANESTHES 699 – INDEPENDENT STUDY**

0-5 credits.

Independent study projects as arranged with faculty or instructional staff.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ANESTHES 910 – INDEPENDENT READING & RESEARCH IN ANESTHESIOLOGY**

1-4 credits.

Independent research under the direct supervision of Anesthesiology Faculty. Each student's research project is individualized to meet student research goals within the context of the faculty research needs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ANESTHES 911 – THE SHOCK COURSE**

2 credits.

Early recognition and aggressive management of shock states is one of the most challenging and rewarding patient care experiences. If done well the patient impact is incredible and lives can be saved. Integrate detailed physiologic understanding of shock states and shock evaluation - including echocardiography - with the pharmacology of shock management to develop a practical approach to patient care. Echocardiography training will emphasize obtaining views, recognizing anatomy and appreciating biventricular function as a method to differentiate shock states and select an appropriate treatment plan. The in-depth science of the course will be supplemented by clinical experiences focusing on shock evaluation and management in the cardiothoracic critical care unit, medical intensive care unit and, when possible, with cardiac anesthesiology enabling the student to develop a practical bedside approach to the evaluation and management of shock.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021

**ANESTHES 919 – INDIVIDUALIZED ANESTHESIOLOGY CLINICAL ELECTIVE**

2-4 credits.

In-depth exposure to inpatient and outpatient anesthesiology as well as sub-specialty anesthesiology, working under the direct supervision of Anesthesiology faculty, residents, fellows and advanced practice providers. Each student's schedule is individualized to meet each location's capacity and student preference.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANESTHES 920 – CLINICAL ANESTHESIOLOGY ELECTIVE**

2-4 credits.

Supervised by house staff, clinical anesthetists and attending physicians. Activities include: pre-operative chart review and anesthetic plan proposal, participating in scheduled procedures, presenting cases and teaching topics, and discussing patient cases. Evaluate and learn to co-manage the full spectrum of inpatient and ambulatory anesthesia patients. Care for patients undergoing sedation, monitored anesthesia care, general and regional anesthesia. Learn the indications for and data provided by various invasive and non-invasive monitoring techniques. Become familiar with relevant pharmacology including, anesthetic agents, muscle relaxants, resuscitation drugs and pain medications. Learn fundamental airway management skills including bag-mask ventilation, supraglottic airway placement, and endotracheal intubation skills. Intravenous access technique practice is taught, including a central line placement course.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANESTHES 922 – CARDIOTHORACIC INTENSIVE CARE UNIT CLINICAL ANESTHESIA ELECTIVE**

2-4 credits.

Participate in the care of critically ill patients assigned to the Cardiothoracic Intensive Care Unit (CITCU) critical care team. Includes post-surgical patients who have undergone coronary artery bypass grafting, cardiac valvular procedures, ventricular assist device placements, cardiac transplantation and lung transplantation. May include patients with significant cardiothoracic surgical history (e.g. patients who have a ventricular assist device or who had prior lung transplantation) who are admitted for "medical" reasons including sepsis or shock of varying etiologies. As part of the CITCU team, participate in management of patients requiring venovenous and venoatrial extracorporeal membrane oxygenator (ECMO) support. The students are supervised by residents (house staff), fellows (largely in critical care anesthesiology, occasionally in pulmonology critical care) and attending physicians.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANESTHES 930 – RESUSCITATION ANESTHESIOLOGY ELECTIVE**

1 credit.

An expanded version of the American Heart Association's Advanced Cardiac Life Support (ACLS) course designed to provide the necessary knowledge and skills to manage the first minutes of a cardiorespiratory emergency using ACLS protocols. Opportunities to learn the proper management of the ten core cases (i.e. Asystole, Bradycardia, Tachycardia, etc.) in the three rescuer roles: lone rescuer; resuscitation team member; and resuscitation team leader. Learn essential resuscitation skills including: recognition of cardiac arrest rhythms and common bradycardias and tachycardias; proper use of conventional and automated external defibrillators (AED); use of transcutaneous pacing devices; advanced airway management; administration of drugs via intravenous and endotracheal routes; recognition of the 12-lead electrocardiogram signs of acute injury and ischemia; adult CPR.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ANESTHES 940 – INTEGRATED ELECTIVE IN PAIN MANAGEMENT**

2 credits.

Direct supervision by residents, fellows, and attending physicians in Anesthesiology, Neurology, and Palliative Care departments, including but not limited to the Acute Pain Service, Regional Anesthesia service, Chronic Pain Service, Chronic Pain Clinic, Headache Clinic, Carbone Cancer Center, and Madison Surgery Center. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, interviewing clinic patients, participating in scheduled procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANESTHES 950 – ADVANCED ANESTHESIOLOGY WORKSHOP**

1 credit.

Focused workshop designed for graduating medical students matched into Anesthesiology. Activities include lectures, discussions, problem-based learning discussion (PBLD), simulation, hands-on workshops.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

## ANIMAL SCIENCES (AN SCI)

### AN SCI 1 – COOPERATIVE EDUCATION/CO-OP IN ANIMAL SCIENCES

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working. The same work experience may not count toward credit in another course.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### AN SCI/DY SCI 101 – INTRODUCTION TO ANIMAL SCIENCES

3 credits.

An overview of animal sciences covering anatomy, physiology, nutrition, reproduction, genetics, management, animal welfare, and behavior of domesticated animals. Food animals are emphasized to discuss their contributions to humans.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### AN SCI/DY SCI 102 – INTRODUCTION TO ANIMAL SCIENCES LABORATORY

1 credit.

Hands-on experience and demonstrations to develop practical skills with animals and to better understand the application of science to food production animals. It covers anatomy, physiology, nutrition, reproduction, genetics, management, animal welfare, and behavior of domesticated animals.

**Requisites:** AN SCI/DY SCI/AN SCI 101 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### AN SCI 110 – ANIMAL HANDLING

1 credit.

Hands-on course that provides an understanding of livestock handling techniques, proper restraint, administering injections, and drawing blood samples. Learn about animal response to human presence and the effect of facility design on animal behavior.

**Requisites:** AN SCI/DY SCI/AN SCI 101

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### AN SCI 135 – GRAND CHALLENGES AND CAREER OPPORTUNITIES IN ANIMAL AND DAIRY SCIENCES

1 credit.

Covers the current key challenges and opportunities in the broad fields of animal agriculture, animal biology, animal health, and veterinary medicine, as well as internship and career opportunities and professional development activities that will maximize the value of an undergraduate career at UW-Madison and provide preparation for post-graduation endeavors.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### AN SCI 200 – THE BIOLOGY AND APPRECIATION OF COMPANION ANIMALS

3 credits.

A systematic coverage of many of the animals (including birds) that humans keep as their social companions. The classification, nutritional requirements, environmental considerations, reproductive habits, health, legal aspects and economics of companion animals and their supportive organizations.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### AN SCI 240 – ANCIENT ANIMALS AND PEOPLES

3 credits.

Provides an introduction to human and animal relationships from prehistory to the present. Examines how animals have influenced social and economic structures of past societies, with a focus on the advent of domestication. Explores the cultural and economic changes that domestication has had on human societies, as well as the behavioral, genetic, and morphological changes that this process had on once wild animals. Emphasizes the methods used to retrace human-animal interactions, drawing on cross-cultural examples from anthropology, ethnozoology, archaeology, history, and genetics.

**Requisites:** None

**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**AN SCI 245 – ANIMAL WELFARE**

3 credits.

Explores animal welfare topics from the animal's perspective. Analyzes contemporary welfare issues and policies based on our scientific understanding of the experiences of animals. Emphasizes farmed animals, but also draws on examples from zoo, lab, and companion animals.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AN SCI 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Honors research work under direct guidance of a faculty member in an area of Animal Sciences. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2007**AN SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Individual introductory to intermediate work under direct guidance of a faculty member in an area of Animal Sciences. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AN SCI/FOOD SCI 305 – INTRODUCTION TO MEAT SCIENCE AND TECHNOLOGY**

4 credits.

Application of biological, technological, and economical principles to muscle and related tissue utilized for food.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) and (CHEM 103, 109, or 115) or graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AN SCI/DY SCI/NUTR SCI 311 – COMPARATIVE ANIMAL NUTRITION**

3 credits.

Nutrients and their source, assimilation, function and requirement.

**Requisites:** BMOLCHEM 314, CHEM 341, 343, or BIOCHEM 501**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**AN SCI 314 – POULTRY NUTRITION**

3 credits.

Provides a conceptual understanding of nutrient requirements for optimal growth and production of commercial poultry species. The use of computer programming for feed formulation is emphasized.

**Requisites:** AN SCI/DY SCI/AN SCI 101**Repeatable for Credit:** No**Last Taught:** Summer 2019**AN SCI 315 – POULTRY ENTERPRISE MANAGEMENT**

3 credits.

Fundamental business and economic principles and practices for successful poultry production with emphasis on problem solving in flock management.

**Requisites:** AN SCI/DY SCI/AN SCI 101**Repeatable for Credit:** No**Last Taught:** Summer 2019**AN SCI/DY SCI 320 – ANIMAL HEALTH AND DISEASE**

3 credits.

Provides an introduction to and exploration of the interconnectivity between factors that affect health and disease and the central role of the immune system using infectious disease in animals as a key focus. Explores principal causes and identification of animal diseases, common diseases of farm animals, zoonoses and public health, disease prevention and management including biosecurity measures and host immune responses. Fosters the appreciation for the translatability and universality of knowledge between human and animal health and disease.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**AN SCI/FOOD SCI 321 – FOOD LAWS AND REGULATIONS**

1 credit.

Food laws and regulations, regulatory and commercial grading standards used in the food industry.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**AN SCI/BOTANY/MICROBIO 335 – THE MICROBIOME OF PLANTS, ANIMALS, AND HUMANS**

3 credits.

Examination of the structure and function of microbial communities that live inside and on host organisms (plants, animals, and humans). Introduction to general concepts of the microbiome and microbiota, and their relationship to host nutrition, health, and disease.

**Requisites:** MICROBIO 101 or 303 or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**AN SCI 336 – ANIMAL GROWTH AND DEVELOPMENT**

3 credits.

Covers growth and development of an animal from a single cell to an organism and factors such as nutrition, hormone, genetics and gut microbials influencing growth and development in both cell and tissue levels. Includes the molecular and cellular basis of prenatal and postnatal growth and development. Focuses on development and growth of tissues including muscle, adipose, connective, mammary, and bone tissues that are associated with animal production. Also includes the use of growth promotants in livestock to improve growth performance and increase the quality of carcasses and animal production.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 and 152), (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), or BIOCORE 383

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI/BSE 344 – DIGITAL TECHNOLOGIES FOR ANIMAL MONITORING**

3 credits.

Introduces key concepts of sensor technology used for livestock and companion animal monitoring and veterinary medicine. Describes applications of Artificial Intelligence (AI) systems for livestock animals and veterinary medicine, including animal monitoring, computer-aided diagnosis, and optimized farm management decisions.

**Requisites:** (MATH 112, 114, 171, or placement into MATH 221) or graduate/professional standing

**Repeatable for Credit:** No

**AN SCI/DY SCI 361 – INTRODUCTION TO ANIMAL AND VETERINARY GENETICS**

2 credits.

The molecular basis for inheritance of monogenic and polygenic traits related to animal disease and production. An introduction to the principles of improving animal health and performance by selection and mating systems in companion animals, horses, livestock, and poultry.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/DY SCI 362 – VETERINARY GENETICS**

2 credits.

The genetic basis for predisposition to disease or resistance to disease in livestock and companion animal species. Genetic defects, their discovery, diagnosis and treatment.

**Requisites:** AN SCI/DY SCI/AN SCI 361

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/DY SCI 363 – PRINCIPLES OF ANIMAL BREEDING**

2 credits.

Application of the principles of quantitative genetics to the improvement of livestock and poultry; breeding value estimation and selection techniques; effects of inbreeding and hybrid vigor; crossbreeding systems.

**Requisites:** AN SCI/DY SCI/AN SCI 361

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI 366 – CONCEPTS IN GENOMICS**

3 credits.

Genomics has revolutionized many fields of science, including animal breeding, plant breeding, physiology, microbiology, and human medicine. A basic overview of the latest concepts in genomics, including 3D genome organization, the importance of genome annotation, the use of genomic testing in plant and animal breeding, the potential of genomic prediction on human medicine, and the latest advances in omics integration.

**Requisites:** Junior Standing and ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 152, (ZOOLOGY/BIOLOGY/ZOOLOGY 101, 102, and BOTANY/BIOLOGY/BOTANY 130), BIOCORE 381, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**AN SCI/DY SCI 370 – LIVESTOCK PRODUCTION AND HEALTH IN AGRICULTURAL DEVELOPMENT**

3 credits.

Physical, biological and social nature of animal agriculture systems and their improvement in developing countries; analysis of the state of livestock research and development in the developing countries and the world role of U.S. animal agriculture.

**Requisites:** AN SCI/DY SCI/AN SCI 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/ZOOLOGY/BIOLOGY 101, or (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**AN SCI/DY SCI 373 – ANIMAL PHYSIOLOGY**

3 credits.

Covers physiological processes that regulate the body and the anatomy and function of different physiological systems. Includes interactions between organ systems, analysis of a single organ system from the molecular to the organismal, and comparisons and contrasts of organ systems among different domestic animal species.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), or (BIOCORE 382, 383, and 384)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**AN SCI 375 – SPECIAL TOPICS**

1-4 credits.

Various topics in Animal Science of current interest to undergraduate students.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**AN SCI 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Animal and Dairy Sciences and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**AN SCI 400 – STUDY ABROAD IN ANIMAL SCIENCES**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**AN SCI/DY SCI 414 – RUMINANT NUTRITION & METABOLISM**

3 credits.

Integrates nutritional and biochemical concepts to understand digestive and metabolic processes in dairy and beef cattle, which are then quantitatively represented to predict and manipulate production and health outcomes.

**Requisites:** AN SCI/DY SCI/AN SCI/NUTR SCI 311, (BIOCHEM 301 or 501) or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**AN SCI 415 – APPLICATION OF MONOGASTRIC NUTRITION PRINCIPLES**

2 credits.

Nutrient requirements for growth and production of monogastric animals. Discuss concepts of establishing nutrient requirements and feeding strategies. Laboratory exercises are designed to develop problem solving skills required for the assessment of nutritional adequacy and economical soundness of feeding programs.

**Requisites:** AN SCI/DY SCI/AN SCI/NUTR SCI 311, (BIOCHEM 301 or 501) or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AN SCI 420 – MICROBIOMES OF ANIMAL SYSTEMS**

3 credits.

Provides a knowledgebase in both theoretical and applied scientific approaches associated with microbiome sciences in animal production systems. Covers the basic principles of microbiology through applied practical approaches in using cross-species comparisons in companion and agricultural species from classical microbiological techniques to novel next-generation sequence-based approaches.

**Requisites:** (ZOOLOGY/BIOLOGY/ZOOLOGY 101 and 102, ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 383) and (CHEM 341, 343, or BIOCHEM 301), or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**AN SCI 431 – BEEF CATTLE PRODUCTION**

3 credits.

Application of genetics, systems of mating, physiology, nutrition and economics to the production of beef.

**Requisites:** AN SCI/DY SCI/NUTR SCI/AN SCI/DY SCI 311, AN SCI/DY SCI/AN SCI 361, and (AN SCI/DY SCI/AN SCI 434 or concurrent registration) or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**AN SCI 432 – SWINE PRODUCTION**

3 credits.

Application of research findings in breeding, feeding, management and marketing to modernize production. Lab may include farm visits, practical exercises in testing changes, and "tools" used by producers.

**Requisites:** AN SCI/DY SCI/NUTR SCI/AN SCI/DY SCI 311, AN SCI/DY SCI/AN SCI 361, AN SCI/DY SCI/AN SCI 434, or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**AN SCI/DY SCI 434 – REPRODUCTIVE PHYSIOLOGY**

3 credits.

Principles of reproductive physiology, improvement of fertility, and artificial insemination.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI 435 – ANIMAL SCIENCES PROSEMINAR**

2 credits.

Methods of assessing information quality are studied. Each student develops an analytical and critical seminar on a topic of personal interest in the animal sciences.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI/DY SCI/FOOD SCI/SOIL SCI 472 – ANIMAL AGRICULTURE AND GLOBAL SUSTAINABLE DEVELOPMENT**

1 credit.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; food security, the role of women in agriculture, and the role of dairy products in a healthy diet.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**AN SCI/DY SCI/FOOD SCI/SOIL SCI 473 – INTERNATIONAL FIELD STUDY IN ANIMAL AGRICULTURE AND SUSTAINABLE DEVELOPMENT**

2 credits.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; and the role of women in agriculture and the role of dairy products in a healthy diet.

**Requisites:** DY SCI/AN SCI/FOOD SCI/SOIL SCI 472

**Repeatable for Credit:** No

**AN SCI 503 – AVIAN PHYSIOLOGY**

3 credits.

Principles of organ and system function with emphasis on male and female reproduction, embryonic development and factors affecting hatchability.

**Requisites:** AN SCI/DY SCI/AN SCI 101

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**AN SCI 508 – POULTRY PRODUCTS TECHNOLOGY**

3 credits.

Procurement, processing and distribution of poultry meat, eggs and derived products; factors affecting quality, including methods of determining quality.

**Requisites:** CHEM 103, 109, or 115

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**AN SCI 511 – BREEDER FLOCK AND HATCHERY MANAGEMENT**

3 credits.

History of artificial incubation relevant to the U.S. hatching industry. Practices involved in successful incubation of hatching eggs. Embryonic development in birds. Management factors involved in breeder hen production and operating a hatchery.

**Requisites:** AN SCI/DY SCI/AN SCI 101

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**AN SCI 512 – MANAGEMENT FOR AVIAN HEALTH**

3 credits.

The occurrence, etiology, clinical signs, control and prevention of infectious and noninfectious diseases commonly affecting domestically reared poultry. Instruction in avian necropsy, zoonosis, sanitation and regulation.

**Requisites:** AN SCI/DY SCI/AN SCI 101

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**AN SCI/FOOD SCI 515 – COMMERCIAL MEAT PROCESSING**

2 credits.

Principles and procedures in the commercial manufacture of processed meat products; sausage manufacturing, curing, smoking, freezing and packaging.

**Requisites:** AN SCI/FOOD SCI 305, FOOD SCI 410, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/F&W ECOL/ZOOLOGY 520 – ORNITHOLOGY**

3 credits.

Introduction to bird biology, ecology, and behavior. Topics include the evolutionary origin of birds and flight, anatomy and physiology, functional morphology, migration, communication, reproductive strategies, ecological adaptations and roles, and biogeographical patterns.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/F&W ECOL/ZOOLOGY 521 – BIRDS OF SOUTHERN WISCONSIN**

3 credits.

Outdoor and indoor labs/lectures emphasizing identification of southern Wisconsin birds by sight and vocalization. Two required Saturday field trips in Southern Wisconsin.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI 610 – QUANTITATIVE GENETICS**

3 credits.

An advanced approach with emphasis on statistical foundations. Classical theory with extensions to maternal and paternal effects. Selection theory is considered in depth.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AN SCI/AGRONOMY/GENETICS/HORT 615 – GENETIC MAPPING**

3 credits.

Computing-intensive course to prepare students for genetic mapping research; linkage analysis and QTL mapping in designed crosses; linkage disequilibrium and association analysis (GWAS). Recommended preparation is undergraduate courses in genetics and statistics and prior experience writing R scripts (such as module 1 of STAT 327).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/NUTR SCI 626 – EXPERIMENTAL DIET DESIGN**

1 credit.

Discuss nutrient requirements, composition of ingredients used to meet requirements and the mathematical steps involved in diet formulation with emphasis on research animals and human subjects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AN SCI 681 – SENIOR HONOR THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**AN SCI 691 – THESIS**

2 credits.

Individual study for majors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI 692 – THESIS**

2 credits.

Second semester of individual study for majors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI 699 – SPECIAL PROBLEMS**

1-3 credits.

Individual advanced work in an area of Animal Sciences under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AN SCI/FOOD SCI 710 – CHEMISTRY OF THE FOOD LIPIDS**

2 credits.

Chemical constitution, structures, reactions, stereochemistry of fats, phospholipids, related compounds; methods of isolation, characterization; synthesis; relation of structure to physical properties.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**AN SCI/FOOD SCI 711 – FOOD BIOCHEMISTRY**

3 credits.

Explores methods for interrogating structure-function relationships, molecular profiles, and microstructure of foods. Provides hands-on experience using computational approaches to model protein-small molecule interactions, analysis of small molecules using high-resolution MS, and protein composition and morphology with fluorescence spectroscopy and microscopy. Knowledge of food chemistry or organic chemistry (such as FOOD SCI 410, CHEM 341, 343, or 345) required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**AN SCI 799 – PRACTICUM IN ANIMAL SCIENCES TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI/DY SCI 824 – RUMINANT NUTRITIONAL PHYSIOLOGY I**

4 credits.

Focuses on rumen microbiology, metabolite modeling, as well as protein and VFA nutrition and metabolism.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI/DY SCI 825 – RUMINANT NUTRITIONAL PHYSIOLOGY II**

4 credits.

Focuses on calf and heifer nutrition, regulation of dry matter intake, plant and forage chemistry, vitamins, lipids, and starch.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**AN SCI/GENETICS/POP HLTH 849 – GENETIC EPIDEMIOLOGY**

3 credits.

This course will provide an introduction to genetic epidemiology. Topics will include a general overview of genetics and Mendelian and complex inheritance, as well as various elements of study design, including participant ascertainment; phenotype definition; biologic sample selection; genotyping, sequencing, and quality control; measurement of covariates, and choice of analytic methods. We will briefly discuss some of the original study designs and then focus on current study designs for the remainder of the class. Additional emerging topics will be briefly touched upon. Students will complete short homework assignments to enforce concepts learned during lectures, discuss journal articles, and prepare a very short grant application for the mid-term project. In the final weeks of class, students will work together to analyze data from a real genetic study, prepare tables, interpret the findings, and present their project to their peers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**AN SCI 865 – DESIGN AND ANALYSIS OF BIOLOGICAL STUDIES**

4 credits.

Experimental design and proper data analysis are critical processes for scientific research. Planning and performing research studies have statistical implications that influence how results are interpreted. Learn the fundamentals of generalized linear models, experimental design, and data analysis using common examples from biological studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**AN SCI 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AN SCI/DY SCI 931 – SEMINAR IN ANIMAL NUTRITION**

1 credit.

Discussion of literature that has a bearing on animal nutrition. Students are to survey the literature and present a seminar.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AN SCI/DY SCI/GENETICS 951 – SEMINAR IN ANIMAL BREEDING**

0-1 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**AN SCI/OBS&GYN/ZOOLOGY 954 – SEMINAR IN ENDOCRINOLOGY-REPRODUCTIVE PHYSIOLOGY**

0-1 credits.

Promotes scientific and professional development. Presenters develop and deliver research presentations to a scientific audience, field questions, and receive critiques about their presentation style and scientific approach. Additional presentations include professional development, career advancement opportunities, and topics of interest to the endocrinology and reproduction community at large.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**AN SCI 990 – RESEARCH**

1-12 credits.

Independent research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHROPOLOGY (ANTHRO)****ANTHRO 100 – GENERAL ANTHROPOLOGY**

3 credits.

General understanding of humans in relation to cultures, evolutionary development and racial diversity, capacities for society, and the development of the world's major cultures.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO 102 – ARCHAEOLOGY AND THE PREHISTORIC WORLD**

3 credits.

Introduction to the ancient world from origins of human culture to the beginnings of written history as revealed by archaeological research at great sites and ruins around the globe. Archaeological analyses of important sites as case studies to illustrate concepts and techniques used by archaeologists in their efforts to understand the diversity of the human past.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 104 – CULTURAL ANTHROPOLOGY AND HUMAN DIVERSITY**

3 credits.

Introduction to cultural anthropology. Comparative cross-cultural consideration of social organization, economics, politics, language, religion, ecology, gender, and cultural change. Includes a primary focus on U.S. ethnic and racial minorities.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 105 – PRINCIPLES OF BIOLOGICAL ANTHROPOLOGY**

3 credits.

Genetic basis of morphological, physiological and behavioral variations within and between human populations, and their origins and evolution.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 120 – FRESHMAN/SOPHOMORE SEMINAR IN ANTHROPOLOGY**

3 credits.

Intensive study of a problem in human variability through study of nontechnical materials. Emphasis on acquiring anthropological concepts through discussion and direct experience of ethnographic, archaeological, or human physical evidence.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ANTHRO/FOLKLORE/INTL ST/LINGUIS 211 – GLOBAL LANGUAGE ISSUES**

3 credits.

Focuses on language and its culture, example topics include: extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO 212 – PRINCIPLES OF ARCHAEOLOGY**

3 credits.

Introduction to the methods, historical development, and scientific principles of archaeology. Discover how archaeologists generate and interpret information about the human past. Introduces scientific inquiry and provides a foundation for pursuing advanced archaeological courses and field research.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO/MED HIST 231 – INTRODUCTION TO SOCIAL MEDICINE**

3 credits.

Provides analytical tools for the critical examination of the social, cultural, political and economic determinants of health conditions and medical practice. Pays special attention to how these factors determine how patients and providers experience and ideate disease and treatment, and how they respond to specific health care policies. Emphasizes the important role that conditions of structural violence and inequality play as determinants of health conditions in a globalized world.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ANTHRO 237 – CUT 'N' MIX: MUSIC, RACE, AND CULTURE IN THE CARIBBEAN**

3 credits.

Explores the history and culture of the Caribbean by focusing on its musics, both religious and secular. Special attention will be directed to the impact of colonialism on the emergence of racially stratified societies. Music will also enable us to investigate the concepts of diaspora and creolization. Other topics include: gender and sexuality, the role of technology in the production and distribution of music, music and politics, the impact of tourism, and the global impact of Caribbean musics.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ANTHRO/AFROAMER/C&E SOC/GEOG/HISTORY/LACIS/  
POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO/ART HIST/DS/HISTORY/LAND ARC 264 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**ANTHRO 265 – INTRODUCTION TO CULTURE AND HEALTH**

3 credits.

Uses the conceptual tools of anthropology to explore how culture, biology, and power together shape the ways people are born, experience good and poor health, seek therapeutic aid, and die. Draws on material from around the world, with a particular focus on the experience of marginalized minority people in the United States.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO/AFRICAN/AFROAMER/GEOG/HISTORY/POLI SCI/SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 300 – CULTURAL ANTHROPOLOGY: THEORY AND ETHNOGRAPHY**

3 credits.

Survey of cultural anthropology with emphasis on ethnographic description, methodology, and contemporary theories. Focuses on humanistic and social scientific approaches to human sociocultural diversity.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO/LINGUIS 301 – INTRODUCTION TO LINGUISTICS: DESCRIPTIVE AND THEORETICAL**

3 credits.

Elementary theory and practical work in phonetics, phonology, morphology, and syntax, with attention to formal grammar.

**Requisites:** Graduate/professional standing. Not open to students with credit for LINGUIS 101.**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 302 – HOMINOID EVOLUTION**

3 credits.

The evolution of the Hominoidea is reconstructed from direct and indirect evidence. Cladistic and phylogenetic analyses are used to study the relationships among species. Interpretations of the fossil record are presented from a historical perspective, focusing on the hominoid-hominid transition.

**Requisites:** ANTHRO 105 or graduate/professional standing**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ANTHRO 303 – HUMAN SKELETAL ANATOMY**

4 credits.

A comprehensive examination of skeletal anatomy at both the gross and histologic levels. Utilizes laboratory methods for the archaeological identification of skeletal fragments; criteria for the estimation of age, sex, stature, and other aspects of forensic anthropology.

**Requisites:** ANTHRO 105 or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO 304 – HEREDITY, ENVIRONMENT AND HUMAN POPULATIONS**

3 credits.

Cultural and ecological factors influencing the composition and structure of human populations; variation and distribution of genes within and between populations; history and evolution of human populations as evidenced by genomes.

**Requisites:** ANTHRO 105, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ ZOOLOGY/BIOLOGY 101, ZOOLOGY/ENVIR ST/F&W ECOL/ENVIR ST/ZOOLOGY 360, BIOCORE 382, BOTANY/ ENVIR ST/ZOOLOGY/BOTANY/ENVIR ST 260, ANTHRO/BOTANY/ZOOLOGY/ANTHRO/BOTANY 410, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**ANTHRO 307 – URBAN ANTHROPOLOGY**

3 credits.

An integrated anthropological view of the city and urbanization as a human and cultural phenomenon, including major theories and concrete data from both 'first', 'second' and 'third' worlds, emphasizing the continuity of urban development from the first cities until now.

**Requisites:** ANTHRO 104 or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**ANTHRO 310 – TOPICS IN ARCHAEOLOGY**

3 credits.

Selected areas, periods or problems in archaeology.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO/AMER IND 314 – INDIANS OF NORTH AMERICA**

3 credits.

Description and analysis of native cultures, and the role of environmental and historical factors in North America.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ANTHRO 321 – THE EMERGENCE OF HUMAN CULTURE**

3 credits.

Worldwide archaeological evidence for the development of human culture and behavior from the earliest appearance of human groups to the threshold of the agricultural revolution.

**Requisites:** ANTHRO 102, 212, 322, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO 322 – THE ORIGINS OF CIVILIZATION**

3 credits.

Global archaeological survey of the origins of pristine civilizations beginning with the development of food production and ending with the emergence of the world's first civilizations. Focus of attention: Near East, Egypt, the Indus Valley, North China, Mesoamerica, and Peru.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 330 – TOPICS IN ETHNOLOGY**

3-4 credits.

Content varies. Some representative topics: peoples and cultures of the European part of the USSR, peoples and cultures of Soviet Asia, anthropology of space and time, anthropology and history, pastoralists and pastoral Nomads, American Indian folklore, etc.

**Requisites:** ANTHRO 100, 104, 300 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 333 – PREHISTORY OF AFRICA**

3 credits.

A survey of the archaeological record of human development in Africa, beginning over two million years ago and continuing through the transition to farming and metallurgy; greatest emphasis on the stone age portion of prehistory.

**Requisites:** ANTHRO 102, 212, 321, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ANTHRO 337 – LITHICS AND ARCHAEOLOGY**

3 credits.

Explores the ways in which humans have used of rocks and associated minerals, i.e. lithics and lapidary technology, to create utilitarian as well as ornamental objects in the past and the present. Explores gender roles in lithic technology and how specific technologies were used to create utilitarian as well as ornamental and symbolic objects. Gain a new perspective of the critical role of lithic technologies in long term human adaptive strategies as well as in ornament and symbolic art.

**Requisites:** ANTHRO 102, 212, 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ANTHRO 339 – ARCHAEOLOGY OF WARFARE AND HUMAN NATURE**

3 credits.

Introduction to the evidence, debates, and theories related to violence and warfare in the human past, and how related behaviors are linked to the evolution of our species and modern manifestations of war. Highlights archaeological methods that recognize past warfare practices. Using case studies from the Pleistocene to the present, explores variations of warfare from all over the world. Topics considered include 1) the highly variable nature of violence and warfare in different cultural settings; 2) the antiquity of warfare; 3) how violence has shaped human societies. Historical and cross-cultural ethnographic research will be juxtaposed against archaeological cases to provide contextualized and data-rich examinations. Learn to critically evaluate arguments, claims, and interpretations made about war, peace, and human nature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ANTHRO 340 – MUSIC, RACE, AND CULTURE IN BRAZIL**

3 credits.

Focuses on music's significant role in the formation and maintenance of Brazilian national identity. Learn how a variety of Brazilian individuals, groups, and institutions have contributed to popular and scholarly debates about Brazilian culture, identity, and forms of belonging. These discussions will be anchored to important themes in Brazil's recent history, present, and imagined future, such as cultural cannibalism (antropofagia), and racial hybridity (mestiçagem). Gain insight into how Brazilian artists and their audiences have debated race and racism through expressive means by analyzing a variety of anthropological and ethnomusicological texts about Brazilian popular music, literature, and its most famous annual ritual, Carnival.

**Requisites:** ANTHRO 100, 104, or sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ANTHRO/RELIG ST 343 – ANTHROPOLOGY OF RELIGION**

3-4 credits.

Anthropological approaches. Illustrated by critical considerations of outstanding contributions. Selected religious systems; areal and topical comparative studies; religion as an ethnographic problem.

**Requisites:** ANTHRO 104 or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ANTHRO 345 – FAMILY, KIN AND COMMUNITY IN ANTHROPOLOGICAL PERSPECTIVE**

3 credits.

Comparison of the form and function of such social institutions as marriage and the family, age and sex groups, secret societies, task groups, and class in cross-cultural perspective.

**Requisites:** ANTHRO 104, 300, or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ANTHRO 348 – ECONOMIC ANTHROPOLOGY**

3-4 credits.

Production, distribution and consumption in a broad range of societies; land tenure and personal property concepts, prestige systems, and incentives to labor.

**Requisites:** ANTHRO 104, 300, or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ANTHRO 350 – POLITICAL ANTHROPOLOGY**

3-4 credits.

Comparison and analysis of political structures, behavior and processes among selected peoples of the world; special emphasis on leadership, authority, power, and the origins of the states; the relevance of primitive political systems to anthropological theory and to the comparative study of politics.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ANTHRO 352 – ANCIENT TECHNOLOGY AND INVENTION**

3 credits.

The origins and development of early technologies. Impact of key prehistoric and pre-industrial inventions on the course of human evolution.

**Requisites:** ANTHRO 102, 212, 321, or graduate/professional standing**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022

**ANTHRO/AMER IND 354 – ARCHAEOLOGY OF WISCONSIN**

3 credits.

Introduction to the archaeological evidence for the diverse Native American cultures of Wisconsin over the past 12,000 years.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ANTHRO 357 – INTRODUCTION TO THE ANTHROPOLOGY OF JAPAN**

3-4 credits.

Japanese culture from anthropological perspectives. Emphasis on the order of meaning which serves both as model for and model of the day-to-day behavior and thought processes of the Japanese.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO/LACIS 361 – ELEMENTARY QUECHUA**

4 credits.

Phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO/LACIS 362 – ELEMENTARY QUECHUA**

4 credits.

Continued introduction to phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty.

**Requisites:** ANTHRO/LACIS/ANTHRO 361

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO/LACIS 363 – INTERMEDIATE QUECHUA**

4 credits.

Advanced morphology and syntax; advanced conversation and composition; cultural background of Quechua speaking peoples through reading of myths, legends and folktales.

**Requisites:** ANTHRO/LACIS/ANTHRO 362

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO/LACIS 364 – ADVANCED QUECHUA**

4 credits.

Continuation of advanced conversation and composition; cultural background of Quechua-speaking peoples through reading of myths, legends, folktales; problems in dialectology.

**Requisites:** ANTHRO/LACIS/ANTHRO 363

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 365 – MEDICAL ANTHROPOLOGY**

3 credits.

The ecology of health and disease in human cultures; health-related social systems and behavior cross-culturally; practical implications of medical anthropology for improving the health of specific populations.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2016

**ANTHRO 370 – FIELD COURSE IN ARCHAEOLOGY**

3-6 credits.

An introduction to the techniques of field archaeology, including site survey, mapping, and excavation by participation in an actual, off-campus archaeological field project. Also instruction in the description and analysis of artifacts. Includes full-time, off-campus, on-site excavation work, which typically takes place outside of Madison. Excavation sites vary.

**Requisites:** ANTHRO 102, 212, 321, 322, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ANTHRO/LACIS 376 – FIRST SEMESTER YUCATEC MAYA**

4 credits.

Introduction to Yucatec Maya language. Focus on acquiring vocabulary and grammar for basic conversational proficiency. Taught through in-class oral and aural exercises, language tapes, and primary texts. Learn about Maya culture, history, folklore, and language politics.

**Requisites:** None**Course Designation:** Breadth – Humanities

Frqn Lang – 1st semester language course

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO/LACIS 377 – SECOND SEMESTER YUCATEC MAYA**

4 credits.

Continued introduction to Yucatec Maya language. Focus on acquiring vocabulary and grammar for basic conversational proficiency. Taught through in-class oral and aural exercises, language tapes, and primary texts. Learn about Maya culture, history, folklore, and language politics.

**Requisites:** ANTHRO/LACIS/ANTHRO 376**Course Designation:** Breadth – Humanities

Frqn Lang – 2nd semester language course

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 391 – BONES FOR THE ARCHAEOLOGIST**

3 credits.

An introduction to the principles and techniques in the identification and interpretation of animal bones. Includes analysis of an archaeological bone assemblage.

**Requisites:** ANTHRO 102, 212, 321, 322, or graduate/professional standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 405 – INTRODUCTION TO MUSEUM STUDIES IN ANTHROPOLOGY**

3 credits.

Provides a comprehensive understanding of the policies, procedures, and ethics pertaining to the development, management, and exhibition of anthropology collections. This includes an overview of the establishment, history, and laws governing anthropology collections and collections management methods used specifically for archaeological artifacts, ethnographic objects, and bioanthropological specimens. Ideal for those interested in natural history museums, museum studies, or the museum profession.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO/BOTANY/ZOOLOGY 410 – EVOLUTIONARY BIOLOGY**

3 credits.

Evolutionary biology, emphasizing how modern scientists study evolution. Topics include: nature and mechanisms of microevolution, macroevolution, adaptation, speciation; systematics and taxonomy; quantitative genetics and measurement of natural selection; phylogenetic analyses of behavior, physiology, morphology, biochemistry; current controversies in evolution.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY/BOTANY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, (ANTHRO 105 and satisfied QR-A requirement), or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 411 – THE EVOLUTION OF THE GENUS, HOMO**

3 credits.

Human evolution beginning with the Pliocene appearance of our genus, Homo, and ending with the worldwide spread of modern Homo sapiens throughout the world.

**Requisites:** ANTHRO 105, 302, or graduate/professional standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 415 – THE ANTHROPOLOGICAL STUDY OF CHILDREN & YOUTH**

3 credits.

Uses the conceptual tools of cultural anthropology to explore the wide range of children's and youths' experiences outside of and beyond school.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ANTHRO 420 – INTRODUCTION TO PRIMATOLOGICAL RESEARCH**

3 credits.

Supervised research on topics selected by students. Independently design a research project, synthesize methods and empirical results, and report one's findings. Develop the skills necessary for independent research in Primatology.

**Requisites:** ANTHRO 100, 105, PSYCH 450, or graduate/professional standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**ANTHRO 424 – HISTORICAL ANTHROPOLOGY**

3 credits.

An introduction to historical approaches in anthropology: topics covered include early theories, evolutionism, ethnohistory, culture change, ritual and symbolic transformation, indigenous/oral histories, conceptions of time and the analysis of texts and visual images.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO/LINGUIS 430 – LANGUAGE AND CULTURE**

3-4 credits.

The relationship of language as a communication system to the culture transmitted by it. Principle problems in the interrelations of language and nonlinguistic human behavior.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO/AMER IND/FOLKLORE 431 – AMERICAN INDIAN FOLKLORE**

3 credits.

An introduction to the genres of American Indian Folklore. Special attention is given to creation stories, trickster tales, and the relationship between folklore and historical memory.

**Requisites:** Junior standing and (ANTHRO/AMER IND/ANTHRO 314, FOLKLORE 100, 230, or 320), or graduate/professional standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2015**ANTHRO/AMER IND/FOLKLORE/GEN&WS 437 – AMERICAN INDIAN WOMEN**

3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO/GEN&WS 443 – ANTHROPOLOGY BY WOMEN**

3 credits.

Contributions of women anthropologists to feminist and anthropological theories and research methods. Field research and gender. Current debates in women's studies and anthropology in light of recent research on women and gender in cross-cultural perspective.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO 448 – ANTHROPOLOGY OF LAW**

3 credits.

A comparative examination of the legal realm of tribal and peasant societies as seen in cross-cultural perspective. Describes the relationship of law to anthropology, presents theories of change of legal systems and provides ethnographic case studies.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**ANTHRO 453 – STUDY ABROAD: TOPICS IN ARCHAEOLOGY**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**ANTHRO 454 – STUDY ABROAD: TOPICS IN BIOLOGICAL ANTHROPOLOGY**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions



### **ANTHRO 455 – STUDY ABROAD: TOPICS IN CULTURAL ANTHROPOLOGY**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2001

### **ANTHRO 456 – SYMBOLIC ANTHROPOLOGY**

3-4 credits.

The study of society through the analysis of symbolic systems. Myth, cosmology, ritual, political symbolism, the symbolic study of kinship, symbols and social change.

**Requisites:** ANTHRO 104 and junior standing, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **ANTHRO 458 – PRIMATE BEHAVIORAL ECOLOGY**

3 credits.

Primate behavior examined from an evolutionary and ecological perspective, focusing on adaptations to the social and nonsocial environment. Topics include: nepotism, reciprocity, competition, cooperation, sex differences, the ecological role of primates in their communities, cognition, and conservation. Considers the major threats to primates today, and how behavioral adaptations and anthropogenic variables interact to affect the future survival of primates at local, regional, and global scales.

**Requisites:** ANTHRO 105, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 101, (BIOCORE 381 and 382), BOTANY/ENVIR ST/ZOOLOGY/BOTANY/ENVIR ST 260, ENVIR ST/FW ECOL/ZOOLOGY/ENVIR ST/F&W ECOL 360, PSYCH 450, or graduate/professional standing

**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **ANTHRO 460 – THE ANTHROPOLOGY OF DANCE: MOVEMENT AND MUSIC IN PERFORMANCE**

3 credits.

Explores the significance of movements, sounds, and the body in the transmission of knowledge, the formation of cultural communities, and the expression of identity. Offers first-hand practical experience of the ethnographic study of dance and movements.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **ANTHRO/AMER IND/BOTANY 474 – ETHNOBOTANY**

3-4 credits.

Study of the interactions between human cultures and plants. Topics include: traditional resource management and agriculture; crop domestication, evolution, and conservation; archaeobotany; indigenous knowledge; folk taxonomy; plants in symbolism and religion; dietary patterns; phytochemistry; global movement of plants and peoples.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Biological Science or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ANTHRO 477 – ANTHROPOLOGY, ENVIRONMENT, AND DEVELOPMENT**

3 credits.

Identifies and examines cultural and environmental factors which should be taken into account in planning effective development. Case studies of development programs in less developed countries. Possible contributions of anthropologists and environmental scientists in planning, implementing, and evaluating development programs.

**Requisites:** ANTHRO 100, 104, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **ANTHRO 490 – UNDERGRADUATE SEMINAR**

3 credits.

Discussion and preparation of reports on specific topics indicated by changing title of seminar.

**Requisites:** Junior standing and declared in the Anthropology undergraduate program or Archaeology undergraduate certificate

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO/FOLKLORE 520 – ETHNIC REPRESENTATIONS IN WISCONSIN**

4 credits.

Representation and self-representation of ethnic cultures in Wisconsin. For example: museums, mass media, ethnic theater.

**Requisites:** ANTHRO 300, FOLKLORE 100, FOLKLORE/GNS/FOLKLORE 200, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**ANTHRO 545 – PSYCHOLOGICAL ANTHROPOLOGY**

3 credits.

Survey of psychologically oriented approaches in cultural anthropology: ethnopsychiatry, the ethnography of emotion, conceptions of the self, cognitive development, and culturally defined deviance and mental illness.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO/ED POL 570 – ANTHROPOLOGY AND EDUCATION**

3 credits.

An exploration of the foundational concepts and methods of educational anthropology. Examines anthropological inquiry on educational research with particular reference to cultural perspectives on education and educational systems, learning as cultural transmission, and application of anthropological knowledge to curriculum.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO 601 – PROSEMINAR IN BIOLOGICAL ANTHROPOLOGY**

3 credits.

Overview of the major theoretical developments and debates in biological anthropology and their relevance to both historical and current research.

**Requisites:** ANTHRO 105 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ANTHRO 603 – SEMINAR IN EVOLUTIONARY THEORY**

3 credits.

Examination of theory relevant to the evolution of humans and nonhuman primates including morphological, behavioral, and genetic aspects.

**Requisites:** ANTHRO 105, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 101, ZOOLOGY/ENVIR ST/F&W ECOL/ENVIR ST/ZOOLOGY 360, BIOCORE 382, BOTANY/ENVIR ST/ZOOLOGY/BOTANY/ENVIR ST 260, ANTHRO/BOTANY/ZOOLOGY/ANTHRO/BOTANY 410, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**ANTHRO 605 – SEMINAR-CURRENT PROBLEMS IN PALEOANTHROPOLOGY**

3 credits.

Current research with attention to the evolutionary biology of humans and fossil human relatives.

**Requisites:** ANTHRO 105, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 101, ZOOLOGY/ENVIR ST/F&W ECOL/ENVIR ST/ZOOLOGY 360, BIOCORE 382, BOTANY/ENVIR ST/ZOOLOGY/BOTANY/ENVIR ST 260, ANTHRO/BOTANY/ZOOLOGY/ANTHRO/BOTANY 410, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**ANTHRO 606 – ETHNICITY, NATIONS, AND NATIONALISM**

3-4 credits.

Analytical treatment of current anthropological approaches to the study of ethnicity, nation, and nationalism accompanied by case studies.

**Requisites:** Senior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ANTHRO/NTP/PSYCH/ZOOLOGY 619 – BIOLOGY OF MIND**

3 credits.

Origins and structures of mind, brain, and consciousness. Transitions from early mammalian through primate to hominid intelligence. Genetics and plasticity in brain development. Modern studies of human brain mechanisms and consciousness.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ANTHRO 668 – PRIMATE CONSERVATION**

3 credits.

Evaluates the conservation status of non-human primates, and considers why different species are vulnerable to different kinds of threats. The ways in which regional and global conservation policies are developed and implemented will also be discussed.

**Requisites:** ANTHRO 458, PSYCH 450, ENVIR ST/FW ECOL/ZOOLOGY/ENVIR ST/F&W ECOL 360, ANTHRO/BOTANY/ZOOLOGY/ANTHRO/BOTANY 410, BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ANTHRO 690 – PROBLEMS IN ANTHROPOLOGY**

3-4 credits.

Independent research in specific problems in physical anthropology, archaeology, or cultural anthropology; under supervision.

**Requisites:** Junior standing and (declared in Anthropology undergraduate program or Archaeology undergraduate certificate), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 691 – SENIOR THESIS**

2 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ANTHRO 692 – SENIOR THESIS**

2 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ANTHRO 696 – ARCHAEOLOGICAL METHODS OF CURATION**

1-3 credits.

Practicum in the curation of prehistoric stone, bone, and ceramics. Involves handling materials, identification of artifacts, conservation techniques, preparation of materials for storage or display.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 698 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ANTHRO 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO/ART HIST/DS/HISTORY/LAND ARC 764 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO 860 – HISTORY OF ANTHROPOLOGICAL THEORY**

3 credits.

Intellectual history of the major theoretical debates and key figures in cultural anthropology up to the 1960's.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO 900 – FUNDAMENTALS OF ANTHROPOLOGICAL THEORY**

3 credits.

Fundamentals of anthropological thought using a cross-section of basic works in social science. Emphasizes discussion, critical analysis, and development of professional writing skills.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ANTHRO/PSYCH 906 – METHODS AND HYPOTHESIS-TESTING FOR BEHAVIORAL ECOLOGISTS**

1-3 credits.

A detailed overview of field methods for behavioral ecologists, focusing specifically on behavioral and ecological sampling techniques. It addresses the challenging process of situating an empirical study within the context of theoretical paradigms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ANTHRO 909 – RESEARCH METHODS AND RESEARCH DESIGN IN CULTURAL ANTHROPOLOGY**

3 credits.

Theoretical and practical aspects of ethnographic research; history of field research in anthropology; research design issues; writing proposals; the fieldwork experience; methods of field data collection; ethical issues; data interpretation and analysis; writing ethnography.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ANTHRO 917 – GLOBALIZATION AND TRANSNATIONAL CULTURES**

3 credits.

Reviewing the current state of anthropological studies of globalization and examining various approaches taken to the subject. Focusing on works that conceptualize and theorize the transnational culture and ethnographies that represent and explore its multiplicity and complexity.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**ANTHRO 919 – ANTHROPOLOGY AND INTERNATIONAL HEALTH**

2 credits.

Examination of international health issues from the theoretical and methodological perspectives of anthropology. Includes case studies of applied medical anthropology work as well as critical analysis of development initiatives in public health.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**ANTHRO/GEN&WS 920 – ANTHROPOLOGY OF GENDER**

3 credits.

Theoretical and ethnographic approaches to the anthropology of gender, focusing on current works. Topics include sexual inequality, research methods, gender and history, gender and ethnographic writing, cultural constructions of masculinity, sexuality, and gender studies and anthropological theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021

**ANTHRO/C&E SOC/ECON/SOC 925 – SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS**

2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 940 – SEMINAR-PROBLEMS IN CULTURAL ANTHROPOLOGY**

3 credits.

Current anthropological literature and methods. Assigned problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 942 – SEMINAR-ARCHAEOLOGICAL PROBLEMS**

3 credits.

Current literature and methods and work on assigned problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO/ED POL 970 – SEMINAR IN ANTHROPOLOGY AND EDUCATION**

3 credits.

Anthropological theory, methodology, and field techniques with specific reference to school ethnography and cross-cultural studies of socialization and education. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ANTHRO/A A E/C&E SOC/GEOG/HISTORY/LACIS/POLI SCI/PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ANTHRO/AFRICAN/ECON/GEOG/HISTORY/POLI SCI 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ANTHRO 990 – RESEARCH AND THESIS**

1-3 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ANTHRO 999 – READING AND RESEARCH**

1-9 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**APPLIED BIOTECHNOLOGY (ABT)****ABT 700 – PRINCIPLES OF BIOTECHNOLOGY**

3 credits.

Principles and techniques pertaining to biotechnology and its applications to our society. Survey of classical and emerging techniques.

**Requisites:** Declared in Applied Biotechnology program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ABT 705 – ETHICS, SAFETY, AND REGULATORY ENVIRONMENTS IN BIOTECHNOLOGY**

3 credits.

Ethical and safety concerns in development, production, funding, and application of biotechnology. Analysis of socioeconomic impacts. Understanding the importance of data integrity. Overview of risk assessment and management in a regulatory environment designed to ensure safety of workers, study subjects, and patients, and protect intellectual property, data, and the environment.

**Requisites:** Declared in Applied Biotechnology program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ABT 710 – PROFESSIONAL AND TECHNICAL COMMUNICATION IN BIOTECHNOLOGY**

3 credits.

Application and analysis of professional scientific communication, both written and oral. Focuses on designing documents that convey complex, data-rich technical and scientific content to audiences with diverse information needs using a variety of professional genres, including reports, proposals, presentations, and documentation.

**Requisites:** Declared in Applied Biotechnology program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ABT 715 – TECHNIQUES IN BIOTECHNOLOGY**

3 credits.

Application of biological and chemical methods to modern biotechnological product development. Overview of analysis techniques used to characterize products and evaluate quality and safety. Exploration of technological pipeline from conception to market, including proof-of-concept assessment, pre-clinical trials, clinical trials, and post-production testing.

**Requisites:** ABT 700

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ABT 720 – EXPERIMENTAL DESIGN AND ANALYSIS IN BIOTECHNOLOGY**

3 credits.

Principles of descriptive and inferential statistics with applications in biotechnology including experimental design, quantitative data analysis, and bioinformatic evaluation of complex molecular and biological data sets.

**Requisites:** Declared in MS Applied Biotechnology or Capstone Certificate in Applied Bioinformatics

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ABT 725 – LEADERSHIP IN ORGANIZATIONS**

3 credits.

Focuses on strategies and tools that managers use to maximize employee contribution and create organizational excellence. Basic business and leadership principles. Best practices to overcome biases that inhibit organizations and teams from communicating effectively. Examples will come from diverse biotechnology fields, including pharmaceuticals, agriculture, and biotechnology services.

**Requisites:** Declared in Applied Biotechnology program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ABT 730 – PYTHON FOR BIOINFORMATICS**

3 credits.

Introduce diverse strategies for computational analysis of macromolecular data using Python including sequence alignment, genome annotation, data retrieval from databases, phylogenetic analysis, and molecular evolution. Experiential learning is emphasized; confidence in practical skills is developed through persistent application of course content to projects focused on current problems in bioinformatic research.

**Requisites:** Declared in MS Applied Biotechnology or Capstone Certificate in Applied Bioinformatics

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ABT 735 – QUALITY CONTROL AND VALIDATION**

3 credits.

Focuses on the importance of quality control and validation in biotechnology product design, development, and manufacturing. Explores quality systems and documentation, global quality standards, and methods for assessing validation including installation, operational, and performance qualifications. Overviews biomanufacturing processes, automation, and cGMP practices necessary to meet quality standards.

**Requisites:** ABT 700, 705, and 710

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ABT 740 – REGULATORY PRACTICE AND COMPLIANCE**

3 credits.

Identifies and examines the key regulatory agencies and practices that govern the highly regulated and diverse biotechnology industry, both domestically and internationally. Highlights current and emerging FDA and ICH regulations and guidance documents to successfully navigate meeting with the agencies and to submit required documentation for successful product development.

**Requisites:** ABT 700, 705, and 710

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**ABT 745 – INDUSTRIAL APPLICATIONS IN REGULATORY AFFAIRS**

3 credits.

Examines the global regulatory environments in risk-based assessment of biotechnological developments across diverse sectors, ensuring consumer and environmental protection. Addresses how validation is essential to the incorporation of emerging technologies into viable, accessible, and successful products. Highlights the stakeholders' role in regulatory oversight and policy through relevant industry case studies.

**Requisites:** ABT 735 and 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ABT 750 – BIOTECHNOLOGY MARKETING AND ENTREPRENEURSHIP**

3 credits.

Examines marketing case studies in diverse areas of biotechnology. Addresses marketing fundamentals and strategies, communicating value proposition strategy, ethical and regulatory concerns, startup strategies, pharmaceutical marketing, b2b marketing, salesforce development, branding, and promotion. Culminates with the creation of a marketing plan/analysis.

**Requisites:** Declared in Applied Biotechnology program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ABT 755 – GLOBAL OPERATIONS AND SUPPLY CHAIN MANAGEMENT**

3 credits.

Focuses on the strategic importance of operations and supply chain to overall performance relevant to a variety of business processes specific to biotechnology. Topics include production, transportation, distribution systems, sourcing, and purchasing.

**Requisites:** Declared in Applied Biotechnology program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ABT 760 – QUALITY AND PROJECT MANAGEMENT**

3 credits.

Quality and project management issues and roles during different phases from RD to market. Introduction to Installation qualification, operation qualification and process qualification (PQ). Project management phases: conceptualizing, planning, executing and closing. Project schedule and time management tools and techniques. Project requirements including quality assurance.

**Requisites:** ABT 720 and 725**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ABT 765 – ASSESSING INNOVATION IN BIOTECHNOLOGY**

3 credits.

A survey of biotechnology assessments in areas such as regenerative medicine, agricultural biotechnology, and bioremediation. Course links disciplines with the critical evaluative role played by scientific discovery, market valuation, intellectual property, freedom-to-operate (FTO), and licensing strategy by assessing the role each played in the commercialization of a specific technology.

**Requisites:** ABT 700**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ABT 770 – PRODUCT DEVELOPMENT**

3 credits.

Explores strategies in evaluating and implementing new technologies or products in the context of different bioindustries. Identifies considerations in product valuation, feasibility of production, scalability, and supply chain management. Models the process of business growth and innovation through integration of emerging technologies.

**Requisites:** ABT 700 and 715**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ABT 775 – TOOLS FOR DATA ANALYSIS**

3 credits.

Using a variety of existing and emerging bioinformatics tools and computational methods, emphasizes hands-on experiences analyzing and interpreting large data sets (e.g. genomic, proteomic, microbiomics, interactome, target discovery). Evaluate and adapt existing computational approaches for specific use in solving a problem in biotechnology.

**Requisites:** ABT 700 and 715**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ABT 780 – BIOINFORMATIC INQUIRY**

3 credits.

Advances the development of competencies promoting efficient analysis of biological data. Emphasizes matching a research problem with the most effective tools for its completion, balancing use of existing software and de novo software development. Advanced aspects of Python and R, algorithmics, machine learning, simulations, and effective communication of results are emphasized.

**Requisites:** ABT 720 and 730**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ABT 785 – APPLICATION OF BIOINFORMATICS**

3 credits.

Exploration and application of existing bioinformatic tools. Implementation of pre-coded solutions to data acquisition, wrangling, analysis, visualization, and structural modeling problems. Complete a project that generates a multi-system workflow to solve bioinformatic problems.

**Requisites:** ABT 720 and 730**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ABT 789 – PRE-CAPSTONE**

1 credit.

Prepares the student for applied self-directed capstone experience. Addressing problem identification, research, and project formulation. Culminates in an oral and written proposal with project schedule.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ABT 790 – CAPSTONE**

3 credits.

Complete a project (report, business plan, program, etc.) in an area of quality assurance and compliance, business and management, and/or research and development. Culminating in a substantive body of work, executive summary, and reflection. Networking and communication in a professional capacity is expected.

**Requisites:** ABT 789**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

## ART DEPARTMENT (ART)

**ART 100 – INTRODUCTION TO ART**

3 credits.

Seeks answers to the fundamental question "What is art?" Through lectures, readings, discussions, and creative projects, we seek answers from multiple perspectives-historical, theoretical, critical, conceptual, formal, and experiential. Develop visual literacy, sophisticated observational skills and a formal language to assist in the interpretation of objects and experiences in the context of art. Through both theory and practice, develop an understanding of the ways artists arrive at the ideas that inform their creative processes. Includes a survey of developments in art media and looks broadly at art movements, trends and styles throughout history and in varied world cultures.

**Requisites:** Not open to students declared in BS-Art, BFA-Art, or BS-Art Ed programs**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 102 – TWO-DIMENSIONAL DESIGN**

3 credits.

Provides an introduction to the fundamentals of two-dimensional design. Develop a clear understanding of visual communication through problem-solving and formal and conceptual experimentation. Learn the elements and principles of design and manipulate those using analog and digital processes. Introduction to the Adobe Creative Suite of products, including InDesign, Illustrator, and (to a lesser degree) Photoshop. Serves as an introduction to professional presentation skills and techniques to hone craftsmanship.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 104 – THREE-DIMENSIONAL DESIGN**

3 credits.

Applying design principles to 3-D investigations. Lectures, studio exercises, discussions.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 107 – INTRODUCTION TO DIGITAL FORMS**

3 credits.

An introduction to a range of digital media techniques for artists and designers, including digital imaging, vector graphics, web design and 3D digital modeling. Emphasis on creative development along with technical skill building.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 108 – FOUNDATIONS OF CONTEMPORARY ART**

3 credits.

Artists' formal, technical and expressive concerns; the principal ideas of movements which have significantly influenced the major tendencies in contemporary art.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART 112 – DRAWING I**

3 credits.

To develop perceptions, use of perspective, line, light and dark, development of space, and expressive qualities in drawing.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ART 176 – DIGITAL PHOTOGRAPHY FOR NON-ART MAJORS**

4 credits.

Introduction to tools, techniques and concepts of digital photography, with an emphasis on the workflow beginning with composition and image capture, to digital manipulation and enhancement, to the end goal of print or online publication. Develop a robust fundamental skill set in digital photography through lectures, readings, discussions, practical instruction, instructor review and group critiques.

**Requisites:** Not open to students declared in BS-Art or BFA-Art degrees.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 208 – CURRENT DIRECTIONS IN ART**

3 credits.

Examination of current artists' motivations, intentions, and processes and their relationship to general developments in contemporary art.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 212 – DRAWING METHODS & CONCEPTS**

3 credits.

Explore the drawing process through projects that address one or more formal, technical, and/or conceptual issues. The concept of drawing as a vehicle for conveying ideas will be addressed through the study of composition, illusional space, perspective and proportion, and the analysis of form.

**Requisites:** ART 112, or declared in a BS-Art, BFA-Art, or BS-Art Ed degree program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 214 – SCULPTURE I**

4 credits.

Introduction to techniques and basic sculpture concepts to provide a survey of sculpture studio practices.

**Requisites:** ART 104

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 222 – INTRODUCTION TO PAINTING**

3-4 credits.

Introduction to various technical processes and aspects of painting. Studio practice, lectures, discussions, and critiques.

**Requisites:** ART 102, 112, 212, or 302

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 224 – CERAMICS I**

4 credits.

Properties of clay and fundamentals of forming; hand-building, throwing, slip-casting, press molding; with emphasis on individual form concepts. Glazing, decorating, firing techniques including reduction, oxidation and primitive methods.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART/DS 226 – TEXTILE DESIGN: OFF-LOOM CONSTRUCTION**

3 credits.

Studio design problems in two and three dimensional off-loom constructions; off-loom weaving, looping, and knotting; historical reference and contemporary application.

**Requisites:** DS 120 and 153

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ART/DS 229 – TEXTILE DESIGN: WEAVING I**

3 credits.

The relationship of hand weaving to textural surfaces and sculptural forms are examined through the study of problems including structure, pattern, composition, and additional conceptual technical possibilities. Content is explored in the development of individual direction and in relationship to the discussion of historical and contemporary textiles and other works of art. Allows students to pursue an advanced investigation of concept and technique of hand-woven cloth.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 232 – LIFE DRAWING I**

4 credits.

Anatomical structure and intrinsic forms involved in drawing from different models. Development of technical control in a range of media.

**Requisites:** ART 212 and (ART 100, 108, or 208)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 236 – BASCOM COURSE**

3 credits.

A low-enrollment course developing skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**ART 242 – WATERCOLOR I**

3–4 credits.

Painting with watercolor and mixed media on paper. Experimental and traditional uses of the media will be explored, emphasizing drawing, composition, and imagination. Field trips.

**Requisites:** ART 112, 212, 222, 316, 326, or 336**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 244 – ART METAL I**

3–4 credits.

Basic jewelry techniques; metal fabrication dealing with piercing, soldering, forming.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 302 – COLOR**

4 credits.

Color phenomena and visual perception as applied in art problems. Lectures, readings in theory, philosophy, and history of design.

**Requisites:** ART 102, 107, 112, 212, 222, 232, 242, 306, 312, 316, 326, 336, or DS 120**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 306 – RELIEF PRINTMAKING**

3–4 credits.

Woodcut, collage print, linoleum cut, and wood engraving; color printing. Studio practice, lectures, discussion, critiques.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 307 – MAKING COMICS 1**

4 credits.

An introduction to making comics as both a subject and means of academic inquiry. This is a rigorous class and the workload is substantial. Students will learn a variety of ways of making pictures and stories using materials that will vary over the course of the semester. Final project will be an original, reproducible, handmade book of at least 32 pages, based on the stories or comics or characters created during the semester. No previous drawing experience necessary, but must be eager to draw seven days per week throughout the duration of the course.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 309 – DIGITAL ART AND CODE**

4 credits.

An introduction to the principles of computer coding in a visual context. Course emphasizes the production of graphical and interactive output delivered on a screen.

**Requisites:** ART 107 or declared in an Art graduate program**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 312 – INTERMEDIATE DRAWING I**

3–4 credits.

The exploration of conceptual drawing in various media. Emphasis on conceptual/formal solutions.

**Requisites:** (ART 212, 232, 316, or 326), or declared in an Art graduate program**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 314 – SCULPTURE II**

4 credits.

Continued investigation in sculpture studio practices with an emphasis on developing concepts and technique.

**Requisites:** ART 214 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 316 – LITHOGRAPHY**

4 credits.

Direct drawing on stone with crayon and tusche, transfer techniques, color processes; studio practice, lectures, discussions, and critiques.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 318 – INTRODUCTION TO VIDEO, PERFORMANCE & INSTALLATION ART**

4 credits.

An introduction to time-based art forms including video, installation, and visual art performance.

**Requisites:** ART 107 and (ART 100, 108 or 208) or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**ART 322 – INTERMEDIATE PAINTING I**

4 credits.

Development of technical processes, concepts, historical continuity. Study and application of various media of oils, acrylics, collage materials.

**Requisites:** ART 222 or declared in an Art graduate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 324 – CERAMICS II**

4 credits.

Continued investigation into forming; hand-building, throwing, slip-casting, press molding; with emphasis on individual form concepts. Glazing, decorating, firing techniques including reduction, oxidation and primitive methods.

**Requisites:** ART 224 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 326 – ETCHING**

4 credits.

Introduction to intaglio printmaking techniques. Studio problems in platemaking and printing.

**Requisites:** (ART 102, 112, 212, 232, 306, 316, or 336) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 332 – LIFE DRAWING II**

4 credits.

Further investigation into anatomical structure and intrinsic forms involved in drawing from different models. Development of concepts and technique.

**Requisites:** ART 232 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 333 – INTRO TO RESPONSIVE WEB DESIGN**

4 credits.

Introduction to user-centered, responsive web design for mobile, tablet, and laptop. Write HTML, CSS, and Javascript directly to design and develop fully responsive websites.

**Requisites:** (ART 102 or 107), 346, and ART 438 or concurrent enrollment in ART 438, or declared in (MFA-Art or MS Design + Innovation)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 334 – WOOD WORKING**

3-4 credits.

Exploration of wood as a medium for constructing creative and functional three-dimensional forms.

**Requisites:** (ART 104, 112, 212, 214, 224, 244, 354 or DS 220) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 336 – SERIGRAPHY**

3-4 credits.

Materials and techniques of silk screen process; silk screen as a fine art form.

**Requisites:** (ART 102, 112, 212, 222, 232, 306, 316, or 326) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 338 – SERVICE LEARNING IN ART**

2 credits.

Students discuss community-based practices in the field, and will work with a community partner in an art-related capacity.

**Requisites:** None

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART/DANCE 341 – SOUND DESIGN FOR THE PERFORMING AND VISUAL ARTS**

3 credits.

Production of audio soundtracks to complement the work of artists. The relationship of sound and music to dance, video, film, computer art, and other interdisciplinary forms.

**Requisites:** Declared in an Art, Dance, or Communication Arts program

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 342 – WATERCOLOR II**

4 credits.

Continued investigations in watercolor and mixed media works on paper with goal of development of concepts and technical skill.

**Requisites:** ART 242 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 343 – METAL FABRICATION AND WELDING IN SCULPTURE**

3-4 credits.

Reviews common welding and metal fabrication techniques available to artists, including various welding processes, brazing techniques, torch work, cutting devices, bending methods, and finishing techniques. Mild steel will be the primary material of exploration.

**Requisites:** (ART 214 or 244) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**ART 346 – BASIC GRAPHIC DESIGN**

4 credits.

Introduces the basic principles of graphic design. Develop an initial understanding of formal, conceptual, and technical aspects of the field. Emphasis will be given to the importance of working process, presentation and craftsmanship.

**Requisites:** (ART 102 or 107) and declared in Art , Art Education, Certificate in Art Studio, or Certificate in Graphic Design; or declared in Art MFA or Design + Innovation MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 348 – INTRODUCTION TO DIGITAL PRINTMAKING**

4 credits.

Provides students with fundamental skills in combining had printed and digital output. Hybrid print integrates laser plate, monoprint, collograph, stencil, stamping, and embossment with inkjet output. Focuses on enhancement of digital output through integration of hand printed elements.

**Requisites:** (ART 102, 107, 176, 306, 316, 326, 336, 346, or 376) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 354 – GLASSWORKING**

4 credits.

Glassworking toward a personal concept of material.

**Requisites:** (ART 104, 214, 224, 244, or 334) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 356 – CODING FOR GRAPHIC DESIGN**

4 credits.

Explore the aesthetic of computational graphic design and typography with physical interaction, sound, data, and digital fabrication.

**Requisites:** (ART 102 or 107), 346, and ART 438 or concurrent enrollment in ART 438, or declared in (MFA-Art or MS Design + Innovation)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART/THEATRE 366 – STAGE LIGHTING I**

3-4 credits.

Application of lighting design to the stage and natural environment. Color principles, lighting instruments, and control equipment. Production participation and labs.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART/THEATRE 372 – SET DESIGN I**

3 credits.

Principles of composition, scale, perspective, and color applied to the stage; production of ground plans, elevations, sketches, and models.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 376 – PHOTOGRAPHY**

3-4 credits.

Techniques, philosophies, and concepts in photography as an art form. Emphasis on personal expression and relationship to other media.

**Requisites:** (ART 100, 102, 104, 107, 108, 176, or 208) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 393 – INTERSHIPS IN ART**

1 credit.

This online course allows students who have found outside art-related internships to earn academic credit in connection with their work experience.

**Requisites:** None

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022



**ART 409 – DIGITAL FABRICATION STUDIO**

4 credits.

Introduction to the practice and application of digital fabrication technologies in an artistic context with an emphasis on extending and integrating with traditional material approaches to art production. Includes theoretical readings devoted to the implications of digital and machine technologies on art practice.

**Requisites:** ART 107 or declared in an Art graduate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 414 – ART FOUNDRY**

3 credits.

Traditional and nontraditional methods of fine art foundry.

**Requisites:** (ART 104, 214, 224, 244, 314, 334, 343, or 354), or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ART 428 – DIGITAL IMAGING STUDIO**

4 credits.

Explore current and historical practices in the digital fine arts while refining conceptual and technical understanding of digital art forms as powerful tools for generating and communicating images and ideas. Students will create and manipulate both static and moving imagery, with implications for digital drawing, painting, print-making, video editing/post-production, and narrative or non-narrative 2D animation in a fine art context.

**Requisites:** (ART 107, 176, 318, 429, or 529) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 429 – 3D DIGITAL STUDIO I**

4 credits.

Introduction to three-dimensional modeling in the computer, in particular the use of 3D digital models for the creation of images and objects.

**Requisites:** ART 107 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 438 – HISTORY OF GRAPHIC DESIGN AND TYPOGRAPHY**

3 credits.

Examines the major developments in graphic design and typography as the fields slowly emerged and began to define themselves during the 19th, 20th, and 21st centuries.

**Requisites:** (ART 102 or 107), and 346 or concurrent enrollment; or declared in Art MFA or Design + Innovation MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART/DANCE 441 – ADVANCED SOUND DESIGN**

3 credits.

Advanced instruction in the production of sound tracks to complement the work of artists in dance, video, film, computer art and other interdisciplinary forms.

**Requisites:** ART/DANCE/ART 341

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**ART 442 – ICONS, SYMBOLS, AND PICTOGRAMS**

4 credits.

Addresses basic visual communication principles that include semiotics, gestalt, form, and context, and applies them to the design of icons, symbols, and pictograms. Cultural, psychological, social, and historical interpretations of these forms are analyzed through design projects, readings, discussion, and research.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**ART 443 – GRAPHIC DESIGN FOR EXHIBITIONS**

4 credits.

Provides an introduction to exhibition design from spatial typography, posters, banners, and wayfinding to online exhibition design, including virtual reality for the Web.

**Requisites:** (ART 102 or 107), 346, and ART 438 or concurrent enrollment in ART 438, or declared in (MFA-Art or MS Design + Innovation)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ART 446 – ARTISTS' BOOKS**

4 credits.

The multiple and sequential visual imagery of the non-printed book, including its design and creation.

**Requisites:** (ART 306, 316, 326, 336, 346, or 376) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 448 – SPECIAL TOPICS**

1-4 credits.

Various beginning-level special topics courses in Art.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 452 – INTERMEDIATE PAINTING: NEW FIGURATION I**

4 credits.

The human figure as a source for creative and independent viewpoints in painting and other media. Students work together in the painting studio from a live model and from other figural sources.

**Requisites:** (ART 222, 232 or 322) or declared in an Art graduate program

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 454 – NEON: LIGHT AS SCULPTURE**

4 credits.

Introduction to light as sculptural medium including techniques for creating art using luminous tubes.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 456 – ILLUSTRATION**

3 credits.

Practice of illustration for commercial printing.

**Requisites:** ART 102 and (ART 212, 232, 312, or 332) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**ART 458 – GRAPHIC DESIGN FOR BRANDING AND IDENTITY**

4 credits.

This is an advanced graphic design course with an emphasis on corporate brand identity development. Topics can include mark development, product packaging, marketing and advertising collateral, web branding, and broadcast advertising development. Special attention is given the application of semiotics and other forms of basic communication theory to the design process.

**Requisites:** (ART 102 or 107 or declared in an Art graduate program), ART 346, and 438

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 463 – INFORMATION GRAPHICS**

4 credits.

This course examines the theory and practice of visual representation of information. Students will learn to create effective and illuminating graphical displays of data based on four basic formulations -- location, time, category, hierarchy, and index.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ART 465 – GRAPHIC DESIGN FOR PACKAGING**

4 credits.

Defines the role of packaging in product identification, presentation, and production. The unique challenges of adapting typography, illustration, design and materials to three-dimensional forms are explored. Research includes marketing objectives, structural integrity and display aesthetics.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ART 466 – PAPERMAKING: HISTORY, ELEMENTS AND TECHNIQUES**

4 credits.

Investigation and explanation of papermaking by hand as it relates to printmaking, drawing, and sculpture. History of papermaking stressing the last hundred years. Techniques of the craft, traditional sheet forming and use of paper pulp as pure plastic material with same educational goals as metal, ceramics, and wood.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 467 – GRAPHIC DESIGN FOR POSTERS**

4 credits.

Examines the design of posters as a mode of communication. Students will learn to create effective combinations of words and images that mobilize principles of composition, perception, and rhetoric. Projects will encourage students to further explore graphic design as a means of communication, artistic expression, and information organization.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**ART 470 – SPECIAL TOPICS IN 4D ART**

3-4 credits.

Topics courses exploring historical, theoretical and studio components surrounding time-based art forms including digital animation, video, installation, and visual art performance.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ART 476 – INTERMEDIATE PHOTOGRAPHY**

4 credits.

Introduction to more advanced printing techniques, large format camera, critical analysis, and discussion of history of photography and current trends.

**Requisites:** ART 376 and (ART 107 or 176) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 506 – ADVANCED RELIEF PRINTMAKING**

4 credits.

Emphasis on color problems, surface qualities; studio practice, discussion, critiques.

**Requisites:** ART 306 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 507 – MAKING COMICS 2**

4 credits.

Builds on the work begun in Making Comics 1. Students will already be comfortable working on deadline, with applying previous comics-making experience to a variety of story styles, both fictional and non-fictional, and with using a variety of materials. This class is just as rigorous and demanding as ART 307. You'll be required to write and draw in your journal every day. Homework is substantial. Students will finish a 3-4 page comic strip each week, even when feeling uninspired. Readings will include more long-form comics. Students will identify a theme present in their own work to be explored through drawing and writing. In the last part of the semester, students will create a 'zine with a focused narrative. It will be an original, reproducible, handmade book of at least 32 pages, comprised of both visual and written elements. Everything created will be drawn, painted and written by hand.

**Requisites:** ART 307

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**ART 508 – COLLOQUIUM IN ART**

1 credit.

Prominent artists, curators critics present their work through lectures and visual presentations.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 511 – ART PERFORMANCE**

3-4 credits.

An exploration of art genres that often incorporate a form of time-based performance, including but not limited to elements found in theater, dance, music, spoken word/poetry, etc.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 512 – ADVANCED DRAWING I**

4 credits.

Advanced level drawing course taught in a structured format where students work on various problems/issues in drawing.

**Requisites:** ART 312 and (ART 100, 108 or 208) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 514 – ADVANCED SCULPTURE WORKSHOP 1**

4 credits.

Instruction in the use of various materials as required by the individual in terms of the formal and conceptual basis of the work. Emphasis on independent research and development of studio projects.

**Requisites:** ART 314 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 516 – ADVANCED LITHOGRAPHY**

2-3 credits.

Development of advanced concepts and techniques in lithography, to include drawing on stone with crayon and tusche, transfer techniques, color processes; studio practice, lectures, discussions, and critiques.

**Requisites:** ART 316 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 518 – ARTIST'S VIDEO**

4 credits.

Principles and techniques in video art.

**Requisites:** (ART 208 and 318) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ART 521 – INSTALLATIONS AND ENVIRONMENTS**

4 credits.

Studio projects in site-specific art making supplemented by readings and examples of relevant contemporary artists' work.

**Requisites:** ART 214 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ART 522 – ADVANCED PAINTING I**

4 credits.

Technical processes; emphasis on personal expression, concepts, in various approaches to painting.

**Requisites:** (ART 322 or 452) or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 524 – ADVANCED CERAMICS I**

4 credits.

Thrown and hand-built forms, clay bodies, glazes, firing, general studio procedure; emphasis on development of personal concepts.

**Requisites:** ART 324 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 525 – ADVANCED TYPOGRAPHY**

4 credits.

An advanced investigation of typography for visual communication and expression. Emphasis is placed on the analysis of meaning as conveyed through, materials, technology, and design. Projects are experimental and are designed to challenge you to expand your understanding of the function typography plays in design, art, and culture.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ART 526 – ADVANCED ETCHING/INTAGLIO**

4 credits.

Research in advanced intaglio techniques. Color printing.

**Requisites:** ART 326 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ART 528 – DIGITAL INTERACTIVE STUDIO**

4 credits.

Concepts and techniques of digital interactive art with an emphasis on physical interaction.

**Requisites:** ART 107 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**ART 529 – 3D DIGITAL STUDIO II**

4 credits.

Intermediate/advanced class covering the theory and practice of 3D digital modeling and animation software as a tool for making art.

**Requisites:** ART 429

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 531 – SCREEN PERFORMANCE**

3-4 credits.

Focuses on performance made for the screen including first person narrative, spoken word, video dance, fictional cinema, experimental documentary and other forms of mediated performance practice.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 532 – ADVANCED LIFE DRAWING I**

4 credits.

Further examination of the percepts of drawing with the human figure. Emphasis on formal elements. Problems of structure. Intense studio practice working from the model.

**Requisites:** ART 332 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 534 – ADVANCED WOOD WORKING**

4 credits.

Development of advanced concepts and techniques in wood-based functional and/or fine art forms.

**Requisites:** ART 334 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 536 – ADVANCED SERIGRAPHY**

4 credits.

Development of advanced concepts and techniques using silk screen processes to create fine art forms.

**Requisites:** ART 336 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 542 – ADVANCED WATERCOLOR I**

4 credits.

Transparent and opaque watercolor media; studio practice, critiques, field trips.

**Requisites:** ART 342 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 544 – ADVANCED ART METAL I**

4 credits.

Advanced techniques in creating functional and/or fine art metal objects.

**Requisites:** ART 244 or 344 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 546 – GRAPHIC DESIGN FOR PUBLICATIONS**

4 credits.

Covers the theory and practice of designing newspapers, magazines, books, and other narrative forms. Emphasis will be placed on advanced typographic theory, and advanced digital and manual production skills.

**Requisites:** (ART 102 or 107 or declared in an Art graduate program), ART 346, and 438

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 548 – SPECIAL TOPICS: ADVANCED LEVEL**

1-4 credits.

Topical courses in art at an advanced level.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 552 – ADVANCED PAINTING: NEW FIGURATION II**

4 credits.

Advanced work in depicting the human figure as a source for creative and independent viewpoints in painting and other media.

**Requisites:** ART 452 or declared in an Art graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 554 – ADVANCED GLASSWORKING**

4 credits.

Advanced concepts and techniques in fine art glass.

**Requisites:** ART 354 or declared in an Art graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART 556 – GRAPHIC DESIGN FOR INTERACTIVE MEDIA**

4 credits.

Explore creative visual interface and interactive storytelling for the Web.

**Requisites:** (ART 102 or 107), ART 346, 438, and one of: (ART 443, 458, 463, 465, 467, 546, 563, 565, 568 or 575); or declared in MFA Art or MS Design + Innovation.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART 558 – PRODUCT DEVELOPMENT FOR GRAPHIC DESIGN**

4 credits.

Focuses on developing an understanding of design processes through the utilization of specific fabrication materials and methods. Experience is gained in giving form to objects and products. Prototyping techniques and digital design tools will be explored. In addition, investigates the movements in the history of product design and the development of materials, production, technologies, consumption and other social and cultural concerns that impact the field. A special focus on the identification and use of sustainable materials and processes.

**Requisites:** (ART 102 or 107), ART 346 and 438

**Repeatable for Credit:** No

**ART 560 – GRAPHIC DESIGN SENIOR THESIS PROJECT AND EXHIBITION**

4 credits.

A capstone experience for seniors in the Graphic Design Program. A hybrid of studio and seminar, course work will combine inquiry, research, creative problem-solving, and design prototyping. Students will use research to launch a comprehensive graphic design thesis project which will be exhibited at the end of the term.

**Requisites:** (ART 102 or 107), 346, 438, and two of: ART 458, 463, 465, 467, 546, 556, 565, 568

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART 563 – GRAPHIC DESIGN FOR GAMES**

4 credits.

Game design is a subdiscipline in which graphic designers create meaningful play and interactive experience through words, images, structure, process, and the study of user experience. This course, which explores both digital and non-digital games, aims to provide you with a critical vocabulary and historical context for analyzing games, as well as the skills and techniques necessary to incorporate game design into your ongoing design practice.

**Requisites:** (ART 102 or 107), ART 346 and 438**Repeatable for Credit:** No**Last Taught:** Fall 2020**ART 565 – TYPEFACE DESIGN**

4 credits.

Examine conceptual and technical processes used for designing fonts and typefaces in a digital environment.

**Requisites:** (ART 102 or 107), ART 346 and 438**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 568 – MOTION TYPOGRAPHY**

4 credits.

Examines conceptual and technical processes used setting type in motion in a digital environment using digital video, computer graphic, and digital photo technologies. Students must take ART 107 and ART 346 prior to enrolling in this course.

**Requisites:** (ART 102 or 107), ART 346 and 438**Repeatable for Credit:** No**Last Taught:** Fall 2019**ART 570 – ADVANCED TOPICS IN 4D ART**

3-4 credits.

Topics courses exploring advanced concepts in historical, theoretical and studio practices in the discipline of time-based art forms, including but not limited to: digital animation, video, installation, and visual art performance.

**Requisites:** ART 470 or declared in an Art graduate program**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**ART/THEATRE 572 – SET DESIGN II**

3 credits.

Historical survey of visual theatre, painting, and architectural styles adapted to various dramatic forms. Application of design elements and styles to contemporary theatre productions.

**Requisites:** ART/THEATRE/ART 372**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**ART 575 – USER EXPERIENCE FOR GRAPHIC DESIGN**

4 credits.

A project-based introduction to the examination of user experience, and is oriented toward practical methods for approaching a design problem. The focus of the course is to develop conceptual design based on the needs of users. Students will receive grounding in user research methods, design sketching, and design validation.

**Requisites:** (ART 102 or 107), ART 346 and 438**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART 576 – ADVANCED PHOTOGRAPHY**

4 credits.

Emphasis on advanced techniques, color, personal concepts and expression, criticism, communicative potential of photography.

**Requisites:** ART 476 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 608 – INTERDISCIPLINARY CRITIQUE IN THE VISUAL ARTS**

3 credits.

Group critique for advanced students working in the various disciplines of the visual arts.

**Requisites:** Senior standing and declared in BS-Art, BFA-Art or BS-Art Ed degree program or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 612 – ADVANCED DRAWING II**

3-4 credits.

Continuation of advanced level drawing. Focus on advanced techniques and conceptual development in conversation with contemporary drawing practices.

**Requisites:** ART 512 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 614 – ADVANCED SCULPTURE WORKSHOP 2**

3-4 credits.

Continuing instruction in the use of various materials as required by each student in terms of the formal and conceptual basis of their work. Emphasis on the development of individually directed studio projects, professional art practices, and preparing work for exhibition.

**Requisites:** ART 514 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022



**ART 622 – ADVANCED UNDERGRADUATE PAINTING WORKSHOP**

3 credits.

Continuation of 522. Entrance is by consent through competitive portfolio review, held in the final week of the fall and spring semesters. Qualified applicants will have completed ART 222, 322, and at least one of the following: ART 312, 332, 342, 452, 512, 522, 542; or have transferred equivalent coursework. Not open to graduate students.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 624 – ADVANCED CERAMICS II**

4 credits.

Advanced concepts and practices using clay/ceramics to create fine art objects.

**Requisites:** ART 524 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 629 – 3D DIGITAL STUDIO III**

4 credits.

An advanced project based class in 3D Digital Animation. Students will complete a single major animation project based on their own proposal as approved by the instructor.

**Requisites:** ART 429 or 529**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 632 – ADVANCED LIFE DRAWING II**

3-4 credits.

Advanced work and examination of the percepts of drawing with the human figure. Emphasis on conceptual development in conversation with contemporary life drawing practices.

**Requisites:** ART 532 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**ART 636 – COMPUTER AUGMENTED PRINTMAKING**

4 credits.

Advanced computer imaging for printmaking. Emphasis is on self-initiated projects that combine printmaking or photographic techniques with digital output.

**Requisites:** (ART 306, 316, 326, 336, or 348) or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ART 642 – ADVANCED WATERCOLOR II**

4 credits.

Advanced concepts and processes in transparent and opaque watercolor media.

**Requisites:** ART 542 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ART 644 – ADVANCED ART METAL II**

4 credits.

Further advanced study in the art of metalsmithing.

**Requisites:** ART 544 or declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 656 – DESIGN PORTFOLIO AND PROFESSIONAL PRACTICE**

4 credits.

Advanced level graphic course designed to prepare senior level students for entrance into the design profession. Portfolio and resume preparation will be the primary emphasis. Legal and professional practice topics also will be addressed.

**Requisites:** (ART 102 or 107), 346, 438, and two of: ART 458, 463, 465, 467, 546, 556, 565, 568**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ART 663 – GRAPHIC DESIGN PRACTICUM**

2 credits.

Gives students direct experience in the field of graphic design by working on actual client-based projects. Projects vary each term, and include both on and off campus clients. The course operates as professional design studio doing work for university, local and regional clients.

**Requisites:** (ART 102 or 107), ART 346 and 438**Repeatable for Credit:** Yes, unlimited number of completions**ART 699 – INDEPENDENT STUDY**

1-3 credits.

Independent undergraduate work in advanced area of study under direction of art faculty.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ART 700 – INTRODUCTION TO GRADUATE STUDIES IN ART**

3 credits.

Introduction to graduate study in art. Will explore the relationships between the contemporary art world, research and studio practice, theoretical issues, and education in the arts. Also addresses building and sustaining a career in the arts.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART 722 – GRADUATE PAINTING I**

2-3 credits.

Graduate level instruction in all painting media.

**Requisites:** Declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ART 726 – GRADUATE INTAGLIO PRINTMAKING I**

2-3 credits.

Graduate level investigations of advanced intaglio methods; exploration toward an individual and mature imagery in graphics materials.

**Requisites:** Declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 736 – GRADUATE GRAPHICS WORKSHOP I**

2-6 credits.

Graduate level study in advanced graphics media. Emphasis on development of personal concepts.

**Requisites:** Declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ART 740 – INTERDISCIPLINARY GRADUATE CRITIQUE**

1 credit.

Present studio research to peers and faculty and engage with collaborative audience representing multiple artistic disciplines. Provides a holistic understanding of the creative process as it relates to practice and research. Diverse array of skills-sets and the opportunity to influence and enhance the creative process strengthening abilities in performing analysis and critical inquiry into practice and research.

**Requisites:** Declared in Art MFA**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 3 number of completions**ART 908 – SEMINAR-ART**

3 credits.

Special topics in grad-level seminars.

**Requisites:** Declared in an Art graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 912 – ADVANCED RESEARCH-DRAWING**

1-4 credits.

Graduate level instruction in all drawing media processes.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ART 914 – ADVANCED RESEARCH-SCULPTURE**

1-4 credits.

Graduate level instruction in all sculpture processes.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 922 – ADVANCED RESEARCH-PAINTING**

1-4 credits.

Graduate level instruction in all painting processes.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ART 924 – ADVANCED RESEARCH-CERAMICS**

1-4 credits.

Graduate level instruction in all ceramics processes.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 944 – ADVANCED RESEARCH-ART METAL**

1-4 credits.

Graduate level instruction in metalsmithing.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021

**ART 996 – ADVANCED RESEARCH-GRAPHICS**

1-4 credits.

Graduate level instruction in all printmaking and photography processes.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART 999 – INDEPENDENT STUDY**

1-4 credits.

Independent graduate work in advanced area of study under direction of art faculty.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## ART EDUCATION (DEPARTMENT OF ART) (ART ED)

**ART ED 321 – INTRODUCTION TO TEACHING ART**

2 credits.

Explore art education careers, develop art and art-integrated curriculum, practice instructional strategies, and conduct fieldwork in community and school-based settings.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART ED 323 – FOUNDATIONS IN ART EDUCATION**

3 credits.

Examination of foundational principles of art education and art curriculum planning, instruction and assessment for kindergarten through twelfth-grade students.

**Requisites:** Declared in Art Education BSE**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART ED 324 – METHODS IN ART EDUCATION**

3 credits.

Study of principles in art curriculum planning, instruction and assessment, classroom management and learner diversity in elementary and secondary schools.

**Requisites:** ART ED 323**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART ED 327 – PRACTICUM IN ART EDUCATION**

6 credits.

Observation and instruction of learners in elementary and secondary school settings. Study of art curriculum, instruction, assessment, learner diversity and class management.

**Requisites:** ART ED 323**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART ED 423 – STUDENT TEACHING IN ELEMENTARY ART**

5 credits.

Supervised student teaching in elementary art classrooms.

**Requisites:** ART ED 324**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART ED 424 – STUDENT TEACHING IN SECONDARY ART**

5 credits.

Supervised student teaching in middle or high school art classrooms.

**Requisites:** ART ED 324**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART ED 425 – SEMINAR IN ART EDUCATION**

2 credits.

Advanced study of current topics in elementary, middle and high school visual arts education.

**Requisites:** ART ED 324**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART ED/CURRIC 493 – PRACTICUM IN SECONDARY SCHOOL ART**

3 credits.

Observation and instruction of elementary and secondary pupils in a laboratory setting. Lecture and discussion of topics related to art instruction.

**Requisites:** Declared in Art Education BSE**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART ED 699 – INDEPENDENT READING AND RESEARCH**

1-3 credits.

Student-designed project and activities to explore a topic in depth.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**ART ED 999 – ADVANCED INDEPENDENT READING**

1-3 credits.

Student-designed project and activities to explore a topic in depth.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015

## ART HISTORY (ART HIST)

**ART HIST 102 – SEEING THROUGH CONSPIRACY THEORIES**

3 credits.

Fake news is not a new problem. In taking on this ongoing issue, we begin before living memory (to avoid the deadening effect of feedback loops within today's media world), with a focus on the visual and built environment. How do conspiracy theories work? Do they fall into patterns? How can we recognize them? If they are empowering, how should we think about that? Visual material plays a special role in the reinforcement of conspiracy theories. Case studies around the world, from the Egyptian pyramids to the birth of "modern" art in the twentieth century, center on ways in which an evidence-based account of the making of an artwork or architectural site has been replaced by a (usually more interesting) story about its true, hidden nature. This story usually purports to reveal the "conspiracy" of an empowered institution or group to keep the truth away from average people. Of course, the reality is often much simpler and the dynamics of power more complex.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ART HIST 103 – TOPICS IN ART HISTORY**

3-4 credits.

Offers an introduction to world art by taking a thematic approach. Topics will center around art and architecture produced in a variety of media, from a wide time span, and a range of cultural and geographic points of origin.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ART HIST 104 – THE ART OF DIVERSITY: RACE AND REPRESENTATION IN THE ART AND VISUAL CULTURE OF THE UNITED STATES**

3-4 credits.

The history of art and visual culture in the United States from the period of colonization until the present from the perspective of how that imagery produced ideas of race and operated to define, exclude, and include various groups over time. Three basic aims: 1. To introduce art history of the United States from c. 1600-2018; 2. To provide skills in visual analysis and critical thinking; and 3. To encourage the understanding of ethnic and cultural minorities in the United States with an emphasis on the visual arts related to marginalization or minority status in the twentieth-and twenty-first century.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 105 – INTRODUCTORY TOPICS IN ART HISTORY**

3 credits.

Introductory topics in Art History.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ART HIST 106 – HAVE BRUSH, WILL TRAVEL: THE ITALIAN RENAISSANCE FROM FLORENCE TO ROME**

3 credits.

Examines artistic developments that took place in Florence in the 15th century, and how the Florentine Renaissance paved the way to the achievements by painters, sculptors, and architects in Rome in the 16th century, many of whom traveled from Florence to Rome in pursuit of economic opportunity. Introduces the numerous important artistic works produced in Florence, Rome, and other artistic centers, and provides a basic understanding of the purposes, methodology, and terminology of art historical study.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ART HIST 107 – THE BODY, SEX, & HEALTH IN ART**

3 credits.

Considers the many fascinating ways in which cultures represented ideas of health, sex, disease, medicine, and death, focusing on the ways different art forms (painting, sculpture, architecture, prints, photography, textiles, decorative arts, hair, costume, music and dance, food) conveyed historically and culturally distinctive ideas about bodies. Linking the topics will be an attention to how notions of race, gender, and disability determine representations of the body. Enjoy an introduction to basic skills in visual interpretation that are widely applicable in today's world, while covering health and body-related topics chosen from the arts of Europe, China, Japan, Africa, the Islamic World, and the United States. Our objects of study range from ancient Greece and Rome to the present, with an emphasis on nineteenth- to twenty-first century art.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 130 – SEEING RACE: ANTI-RACISM AND VISUAL CULTURE**

3 credits.

Confronting how images work to shape ways of seeing race, this introduction to visual cultures tracks how power works through the visual - from visual surveillance and racial profiling to anti-racist visual activism. Trains critical understanding of the role of imaging in producing ways of seeing race in its intersections with gender, sexuality, and ability. Through critical consideration of the spectacle of racialized violence and the everyday micro-aggressions of the stereotype, addresses the ways that images harm. Also considers how just representation may offer restitution and repair. Explores forms of anti-racist visual activism that seize the power to look back. And questions the ethics of an assumed right to look and to take an image. In asking these imperative ethical and political questions about what images do, trains the critical capacity to harness and intervene in the powers of imaging.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 201 – HISTORY OF WESTERN ART I: FROM PYRAMIDS TO CATHEDRALS**

4 credits.

Examines the arts and cultures of Europe and the Mediterranean basin before the Renaissance. Explores canonical works such as the pyramids at Giza, the Parthenon in Athens, the Venus di Milo, Hagia Sophia in Constantinople, the Book of Kells, the Great Mosque at Córdoba, Chartres cathedral, and Giotto's Arena Chapel. Define art broadly, to encompass the material culture of everyday life, including jewelry, ceramics, and textiles. Considers the social and historical contexts of art and artistic production - art and imperialism, ethnicity, technology, religious ritual and belief, and myth and storytelling, and its relationships to basic human concerns: death and the afterlife, desire and the body, self-definition and portraiture, power and propaganda, monstrosity and the supernatural, the divine and the sacred. Develops crucial skill sets: critical visual analysis, contextual interpretation, research methods and resources, historiography, and oral, written and digital communication.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 202 – HISTORY OF WESTERN ART II: FROM RENAISSANCE TO CONTEMPORARY**

4 credits.

Examine the arts and culture of Europe and North America from the Renaissance through the present. Explore important fine art, architecture, decorative arts, and photographic masterpieces by artists like Leonardo da Vinci, Rembrandt van Rijn, Claude Monet, Paul Cézanne, Pablo Picasso, Frida Kahlo, and Frank Lloyd Wright. Learn how works of art were valued from the moment of their making, fought over by different nations, bought, sold, stolen, or ignored for centuries and revived only recently for study through the political, historical, social and cultural contexts of their making. Critically examine the concept of artistic genius; the influence of colonialism and imperialism on artistic production and consumption; the role of the patron and the art market in art's production and circulation; the relationship of fine art and popular culture; and the idea of globalization as it relates to "western" artistic traditions. Develop skills in visual analysis to understand artistic production.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ART HIST 203 – SURVEY OF ASIAN ART**

3-4 credits.

Introduction to the artistic traditions of China and Japan from neolithic times to the nineteenth century and the Buddhist art of India with its subsequent East Asia embodiments.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018

**ART HIST 205 – GLOBAL ARTS**

3-4 credits.

ART IS GLOBAL (and always has been). Today, we find Egyptian protest artists inspiring activists around the globe via the internet, but in earlier times, Roman glass and Buddhist icons moved along the ancient Silk Route, networks of exchange flourished in the medieval Mediterranean region, and colonial empires brought visual cultures into volatile contact. Learn how to analyze images and objects produced through such exchanges that occurred around the world from ancient times through the contemporary. Develop skills needed to live fully in a world in which borders are no barriers to the movement of images, objects, and ideas and to deepen understanding of cultural differences and interactions. By exploring works in a range of media and tracing processes of cross-cultural exchange, develop sensitivity to visual and material form and a solid foundation in the practice of visual and material analysis.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**ART HIST 206 – SURVEY OF PHOTOGRAPHY: 1839 TO 1989**

3-4 credits.

Survey of 150 years of photography's processes, practitioners, and genres. Emphasis on tensions between its commercial, vernacular, and artistic forms.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ART HIST 210 – A HISTORY OF THE WORLD IN 20 BUILDINGS**

3 credits.

Explores the world and its histories through an examination of its great buildings. Employs a case study, cross-cultural approach to the study of architecture, rather a comprehensive survey of architecture. Learn to appreciate the interaction between culture, history, and architectural form across time and space.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ART HIST 227 – THE ENDS OF MODERNISM**

4 credits.

Considers the end of Modernist art as it gives way to what is called, problematically, contemporary art. While the term modern may generally mean what is vanguard or current, Modernism indicates a period of art (and the humanities) ranging from, arguably, 1880-1950. By considering its end, one can study four pivotal aspects of the movement: its origins, themes, and afterlives, as well as the art and histories that challenge its coherence. Modernism emerges as a heterogeneous set of images and attendant discourses which, negatively or positively, continue to work within the contemporary artistic and cultural moment.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ART HIST/AFROAMER 241 – INTRODUCTION TO AFRICAN ART AND ARCHITECTURE**

3 credits.

Examines the rich heritage of African arts and architecture as they shape and have been shaped by the histories and cultural values (social, political, religious, philosophical, and aesthetic) of African peoples, both past and present, on the continent where humanity began. It includes an historical overview of selected artistic traditions from different parts of the continent from 26,000 BCE to the 21st century and thematic/cultural case studies: artists and aesthetics; textiles, decorative, and personal/body arts; architecture; and individual artists.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**ART HIST/AFROAMER 242 – INTRODUCTION TO AFRO-AMERICAN ART**

3 credits.

Historical survey of African American art. Beginning with the African heritage and concluding with creativity of the 1970's, examine the evolution of African American art. Attention to the aesthetic sensibilities of diverse styles as well as the social significance of Black art within the art arena.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



### **ART HIST/ANTHRO/DS/HISTORY/LAND ARC 264 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ART HIST/CLASSICS 300 – THE ART AND ARCHAEOLOGY OF ANCIENT GREECE**

3-4 credits.

Explores the art and archaeology of ancient Greece from the Bronze Age through the Hellenistic period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ART HIST 301 – MYTHS, LOVES, AND LIVES IN GREEK VASES**

3-4 credits.

Explore the world of the ancient Greeks through their painted pottery. Greek pottery offers a uniquely rich imagery of mythology, athletics, domestic scenes, fabulous monsters, drinking parties, and other aspects of Greek life and imagination. They were used by ordinary people, and their use offers insights into their everyday lives and concerns, and a counterbalance to the elite accounts preserved in literature and poetry. Consider the long history of Greek vases from about 800 BC until about 350 BC, and focus on themes such as relationships with the East, myth and epic poetry, narrative, and everyday subjects such as women's lives, death and the afterlife, and the symposium. Make use of the excellent collection of Greek vases in the Chazen Museum, and write research papers using that collection.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ART HIST 302 – GREEK SCULPTURE**

3-4 credits.

Problems in style, techniques and reconstruction of glyptic sculpture, koroplastics and bronzes from the Late Bronze Age through fifth century B.C.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ART HIST 303 – TOPICS IN ART HISTORY**

3 credits.

Surveys the arts or visual culture of varying geographical regions, time periods, or cultures depending on selected topic.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **ART HIST/CLASSICS 304 – THE ART AND ARCHAEOLOGY OF ANCIENT ROME**

3-4 credits.

Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ART HIST 305 – HISTORY OF ISLAMIC ART AND ARCHITECTURE**

3 credits.

Surveys the architecture, landscape, book arts, and luxury objects produced in Islamic contexts from Spain to India from the 7th through the 21st centuries. Attention will be focused upon the relationships between Islamic visual idioms and localized religious, political, and socioeconomic circumstances. In particular, examine the vital roles played by theology, royal patronage, ceremonies, gift exchange, trade, and workshop practices in the formulation of visual traditions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART HIST 307 – FROM TOMB TO TEMPLE: ANCIENT CHINESE ART AND RELIGION IN TRANSITION**

3 credits.

How did ancient Chinese create an underground space for the afterlife? Why was jade used as a medium to prolong human life or transcend the finite world? How was Buddhist art reappropriated in China? Why did calligraphy emerge as the highest artistic form of self-expression? What is the art of the silk-road? Learn about art forms and concepts that developed in China from remote antiquity to the mid-10th century. The artworks that survive from this long period were created primarily in the contexts of funerary culture and religion, while knowledge of art made for other purposes is based on texts. Organized chronologically, examine the materials, techniques, and functions of the most important artistic media in each period. These media will include jade-carving, metalwork, sculpture, ceramics, calligraphy, painting, textile and architecture. Consider the aesthetic concepts and social groups associated with the various art forms.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 308 – THE TASTES OF SCHOLARS AND EMPERORS: CHINESE ART IN THE LATER PERIODS**

3 credits.

In what ways were Chinese arts special and noteworthy within the broad history of world art? Why is Chinese landscape painting regarded as the "highest form" of Chinese painting? How did scholars' taste influence garden, furniture and other craft-making? Why did each emperor have his own porcelains made as a way to claim his sovereignty? How did the booming of print culture influence Chinese religious practice in the early modern period? Why did dreams become a popular subject in Chinese art? Learn about art forms and concepts that developed in China from the mid-10th century to the early 20th century. Chronologically, examine the development of painting, calligraphy, woodblock printing, ceramics, lacquer wares, textile, architecture, and photography. In addition to material, technique, subject and function, consider the aesthetic concepts and social groups associated with various art forms.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ART HIST 310 – ICONS, RELIGION, AND EMPIRE: EARLY CHRISTIAN AND BYZANTINE ART, CA. 200-1453**

3 credits.

Why did early Christians consider art necessary, if potentially dangerous? How did they adapt and compete with Roman and Jewish traditions? How were the visual propaganda and monumental architecture of the Roman Empire transformed during a millennium of Byzantine (East Roman) rule? These are key questions addressed as we explore the role of architecture and images in religion and imperial politics of the Mediterranean basin between the 3rd and 15th centuries. Other broader topics include the cult of the saints; theories and functions of icons and iconoclasm in Orthodox Christianity; text and image in illuminated manuscripts; multi-sensory aspects of sacred space and ritual; Byzantium's role in global cultural exchange.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 318 – ROMANESQUE AND GOTHIC ART AND ARCHITECTURE**

3-4 credits.

Art and architecture of Western Europe, ca. 1000 to ca. 1350. Particular emphasis on the relationship of the arts to theology, ritual, concepts of the body, rulership and courtliness.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ART HIST 320 – ITALIAN RENAISSANCE ART**

3-4 credits.

Painting, sculpture, and architecture.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**ART HIST 323 – FROM MICHELANGELO & RAPHAEL TO TITIAN: THE ARTS IN 16TH CENTURY ITALY**

3-4 credits.

Examines art from 1500-1570, or the High Renaissance to Mannerism, and concludes at the beginning of the Church Reform period. Emphasis is on painting, sculpture and architecture, but the graphic and decorative arts as well as patronage and the impact of global discoveries also are included.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020

### **ART HIST 331 – ANGELS, DEMONS, AND NUDES: EARLY NETHERLANDISH PAINTING FROM BOSCH TO BRUEGEL**

3-4 credits.

Over the course of the fifteenth and sixteenth centuries, painting in the Netherlands experienced dramatic technological advancements: the application of oil on panel allowed for an unprecedented richness of color; experiments with optics led to improved illusions of space; artists rendered light and reflections as never before. Did these advancements in depicting the natural world conflict with or enhance the portrayal of spiritual visions? Did realism pave the way for secular art? Looks critically at the relationship of science and art, tradition and innovation, the imagined and the experienced. The delicate preciousness of Jan van Eyck, the strange spaces of Petrus Christus, the bizarre hellscapes of Hieronymus Bosch, and the peasant festivals of Peter Bruegel will guide us through these themes.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **ART HIST 335 – STUDY ABROAD IN ANCIENT/MEDIEVAL ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2001

### **ART HIST 336 – STUDY ABROAD IN RENAISSANCE/BAROQUE/NORTHERN ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2002

### **ART HIST 337 – STUDY ABROAD IN 18TH-20TH CENTURY ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2001

### **ART HIST 338 – STUDY ABROAD IN AFRICAN/ASIAN ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 1998

### **ART HIST 341 – ITALIAN BAROQUE ART**

3-4 credits.

Italian painting, sculpture, architecture, and the graphic arts between 1600 and 1750 with emphasis on Caravaggio, the Carracci, Artemesia Gentileschi, Bernini, Algardi, Borromini, the Tiepolo family, and Piranesi.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### **ART HIST 346 – BRITISH ART AND SOCIETY FROM THE EIGHTEENTH CENTURY TO THE PRESENT**

3-4 credits.

Major movements covered include: eighteenth century art of the public sphere (Hogarth, Wright of Derby), Neo-Classicism (Reynolds), Romanticism (Blake, Turner), landscape, Pre-Raphaelites, modern movements and the postmodern revival of British art.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **ART HIST 350 – 19TH CENTURY PAINTING IN EUROPE**

3-4 credits.

History of European painting from 1800 to 1900.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ART HIST 351 – 20TH CENTURY ART IN EUROPE**

3-4 credits.

Major artists and movements from 1880 to 1950.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ART HIST 354 – CROSS-CULTURAL ARTS AROUND THE ATLANTIC RIM: 1800 TO THE PRESENT**

3-4 credits.

Interdisciplinary study of cross-cultural exchange and conflict, focusing on the visual arts, with sections on literature, film and music from the Americas, Africa and Europe.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 355 – HISTORY OF PHOTOGRAPHY**

3 credits.

European and American photography from its invention to the challenge of electronic media, emphasizing the student's development of a critical approach to the medium.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ART HIST 357 – HISTORY OF WISCONSIN ARCHITECTURE, 1800-PRESENT**

3 credits.

Introduces methods of studying historical architecture through a focused examination of buildings across the state of Wisconsin. Learn about particular building features, building types, and methods of approaching buildings through a tight focus on a bounded geographical realm. This geographical focus allows for in-depth analysis and research of buildings.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST/AMER IND 359 – AMERICAN INDIAN ART HISTORY: CONTEMPORARY ISSUES**

3 credits.

A thematic introduction to contemporary (1960 - present) Native North American art drawing from historic (pre and post-contact) precedents. Topics are generated from the conceptual themes of contact, conflict, exchange, appropriation and re-appropriation of American Indian imagery, materials, and ideas.

**Requisites:** AMER IND 100 or sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2013**ART HIST 360 – GORE LUXURY IDENTITY MIMESIS: NORTHERN RENAISSANCE**

3 credits.

Why do Netherlandish Lamentations feature bloody, putrefying wounds? Why is a skull distorted across Holbein's Ambassadors? Is there interracial love in Bosch's Garden of Earthly Delights? Featuring the cultural production of Jan van Eyck, Tilman Riemenschneider, Albrecht Dürer, Hieronymus Bosch, Hans Holbein the Younger, Pieter Bruegel the Elder, and others, surveys both visual culture and canonical monuments of art in Northern Europe c. 1400-1570. Engage with media ranging from mass-producible prints to the pseudo-antique format of medals, emphasizing the canonical formats of painting and sculpture. How did this visual output emerge in the context of cultural changes in the spheres of naturalism, technology, humanism, theology, and European "expansion," among others? Informed by readings of primary and secondary textual sources, develop strong skills in visual analysis, a deep sense of historical context, and experience with traditional methodologies.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST/DS 363 – AMERICAN DECORATIVE ARTS AND INTERIORS: 1620-1840**

3-4 credits.

Interdisciplinary study of the design, production, and consumption of household objects and their American domestic settings, 17th through the early 19th centuries.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**ART HIST 364 – HISTORY OF AMERICAN ART: ART, MATERIAL CULTURE, AND CONSTRUCTIONS OF IDENTITY, 1607-PRESENT**

3-4 credits.

Examines the history of American Art from the period of permanent European settlement through the present. Works of art and other forms of material culture will be explored and discussed within the context of philosophical, historical, social, and cultural developments in the United States and across the globe.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**ART HIST 365 – THE CONCEPT OF CONTEMPORARY ART**

3-4 credits.

Traces out some of the radical changes in art produced after roughly 1950, or what might be called contemporary art. focuses on American and European art after the "decline" of Modernism. That entails becoming familiar with movements ranging from color field painting, to postmodern production, to performance, video, and installation. Additionally, attention will be paid to artists and artwork that are not adequately represented by the traditional categories of art history.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**ART HIST 372 – ARTS OF JAPAN**

3-4 credits.

A survey of Japanese art, including painting, sculpture, architecture, woodblock prints and various crafts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ART HIST/RELIG ST 373 – GREAT CITIES OF ISLAM**

3 credits.

A comparative study of the foundation and development of five great cities in the history of Islam: Cairo, Istanbul, Delhi, Mecca, and Isfahan. Architectural projects, ornamental idioms, and changes to the urban plan are studied from aesthetic and cultural perspectives. Integrates historical and religious studies to highlight the shifting nature of Islamic culture, from the tenth century CE to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 375 – LATER JAPANESE PAINTING AND WOODBLOCK PRINTS**

3-4 credits.

An introduction to the history and aesthetics of Japanese painting and woodblock prints from 1600 to 1900.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**ART HIST/ASIAN 379 – CITIES OF ASIA**

3 credits.

Historical overview of the built environment of cities of Asia from antiquity to the present; architectural and urban legacy in its social and historical context; exploration of common themes that thread through the diverse geographical regions and cultures of Asia. Not open to students with credit for LCA 379 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ART HIST 403 – TOPICS IN ART HISTORY**

3 credits.

Topics will vary as to media, geography, culture, and time frame.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ART HIST 405 – CITIES AND SANCTUARIES OF ANCIENT GREECE**

3 credits.

Topics include urbanism in ancient Greece in theory and practice; the forms, technologies, patronage and use of buildings; the creation and conception of urban space; and the organization of religious sites, dedications, and rituals.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 407 – TOPICS IN NINETEENTH CENTURY ART**

3-4 credits.

Nineteenth century visual culture. Topics include: representations of race and gender; the history of photography; popular imagery and aspects of Modernism.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022

**ART HIST 408 – TOPICS IN TWENTIETH-CENTURY ART**

3-4 credits.

Special topics of 20th-century art that focuses variously on Europe, England, America, or their international interaction. Emphasis on art in its historical and social context.

**Requisites:** Sophomore standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 409 – TOPICS IN CONTEMPORARY ART**

3 credits.

Topics offered concern the rigorous study of the history and theory of contemporary art.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ART HIST 411 – TOPICS IN ASIAN ART**

3-4 credits.

In-depth examination of special topics related to Asian art, including South Asia, East Asia, Southeast Asia, and Central Asia.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 412 – TOPICS IN AFRICAN AND AFRICAN DIASPORA ART HISTORY**

3-4 credits.

Cultural and historical forces that have shaped the arts of either a specific people or a specific site in Africa or the African Americas.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ART HIST 413 – ART AND ARCHITECTURE IN THE AGE OF THE CALIPHS**

3 credits.

The tenth century CE marked a period of drastic change in the Islamic world, as the unified Islamic caliphate splintered into three rival dynasties: the Sunni Iraqi Abbasids, Spanish Umayyads, and the Shi'ite Fatimids in Egypt. Consider this turning point in the history of Islamic culture through the lens of art and architectural patronage. Explore the architectural and urban projects of the three dynasties to examine competing visions of power, sources of legitimacy and the development of Cairo, Baghdad/Samarra and Cordoba as capital cities. Also consider the role of portable arts, addressing the role of exchange and gift-giving in the Mediterranean context and the problems of attribution in this highly mobile environment. Themes include the role of sectarian identity (Shi'ite vs Sunni); the incorporation of Christian and Jewish culture; the relation between the court and urban populations; and the meaning of ornament and style in Islamic art.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ART HIST/MEDIEVAL 415 – TOPICS IN MEDIEVAL ART**

3 credits.

Advanced topics in Medieval art. Topics may include: "Death and the Afterlife in Medieval Art"; "Civic Art and Architecture and Public Space in Medieval Italy"; "Rome in the Middle Ages"; "Pilgrimage the Cult of the Saints in Medieval Byzantine Art."

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART HIST 420 – TOPICS IN ITALIAN RENAISSANCE ART**

3 credits.

Advanced topics in Italian Renaissance art.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**ART HIST 425 – RACE AND GENDER IN ITALIAN EARLY MODERN ART**

3 credits.

Focuses on critical omissions in traditional characterizations of Italian Renaissance art. Gender and race issues created tensions between historical contexts and visual representations, often idealized or obscured. Reevaluates imagery of nudes, witches, children, and material culture.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**ART HIST/ASIAN 428 – VISUAL CULTURES OF INDIA**

3 credits.

Concentrates on image complexes (art, photography, and cinema) and visual environments (architecture, urban planning, and public rituals) of India; examination of visual culture through thematic issues such as, sexuality, patronage, cultural encounter, transculturation, ways of viewing, modernism, and nationalism. Not open to students with credit for LCA 428 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ART HIST 430 – TOPICS IN VISUAL CULTURE**

3 credits.

Introduces key issues, theories, and methods in visual cultures studies, emphasizing aspects that affect the practices of art history and providing a changing topical focus that addresses new research in this developing interdisciplinary area.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 431 – TOPICS IN THEORY**

3 credits.

Introduces philosophy and theory relevant to the study of art history and visual cultures with a focus on a particular body of theoretical work and an organization in terms of key questions and concepts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ART HIST 435 – STUDY ABROAD IN ANCIENT/MEDIEVAL ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ART HIST 436 – STUDY ABROAD IN RENAISSANCE/BAROQUE/NORTHERN ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ART HIST 437 – STUDY ABROAD IN 18TH-20TH CENTURY ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ART HIST 438 – STUDY ABROAD IN AFRICAN/ASIAN ART**

1-6 credits.

Treatment of an art historical topic in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions

**ART HIST 440 – ART AND POWER IN THE ARAB WORLD**

3 credits.

Considers the use of art and architecture as an expression of power in the Arab world, from the seventh century to the present. Beginning with the establishment of the caliphate and ending with the arts of revolution following the Arab Spring, investigates the shifting role of art and architecture in the quest for political dominance. With a particular focus on the arts of Cairo, Baghdad, Cordoba, Mecca, Jerusalem, Damascus, and the modern Arabian Gulf, explore competing visions of power and sources of legitimacy, through the lens of artistic production.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 454 – ART IN GERMANY, 1900-1945**

3-4 credits.

Expressionism and its sources, with an emphasis on developments prior to World War I; the Bauhaus and the later careers of major figures.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**ART HIST 457 – HISTORY OF AMERICAN VERNACULAR ARCHITECTURE AND LANDSCAPES**

3 credits.

Survey of American vernacular buildings and landscapes from the colonial period to the present. Emphasis is on acquiring descriptive tools and developing interpretive frameworks to explore the significance that these vernacular environments have had for their makers and users.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**ART HIST 468 – FRANK LLOYD WRIGHT**

3-4 credits.

An analysis of Frank Lloyd Wright's architecture and writings.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2016**ART HIST 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists offer interdisciplinary instruction on topics appropriate to their specializations.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**ART HIST 475 – JAPANESE CERAMICS AND ALLIED ARTS**

3 credits.

A history of Japanese ceramics and related topics such as Chinese and Korean ceramics and the tea ceremony. Emphasis placed on the technological, cultural, political, and economic, as well as aesthetic, dimensions of ceramic development.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ART HIST/RELIG ST 478 – ART AND RELIGIOUS PRACTICE IN MEDIEVAL JAPAN**

3 credits.

A study of spaces, objects, and images within the context of religious belief and practice in Japan between 1300 and 1600, when great Zen monasteries grew up alongside older Buddhist/Shinto religious "megaplexes," and new salvationist sects spread throughout Japan.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**ART HIST 479 – ART AND HISTORY IN AFRICA**

3-4 credits.

Selected African art traditions in their historical and cultural settings.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018

**ART HIST 500 – PROSEMINAR: SPECIAL TOPICS IN ART HISTORY**

3 credits.

Advanced topics in Art History taught in a seminar-style format. Topics will vary as to media, geography, culture, and time frame.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 505 – PROSEMINAR IN ANCIENT ART**

3 credits.

Advanced topics in Ancient Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ART HIST 506 – CURATORIAL STUDIES EXHIBITION PRACTICE**

3 credits.

Preparation of an exhibition for the Chazen Museum of Art or other exhibition spaces on campus. Help conceptualize the exhibition and its layout, research and interpret individual objects, prepare wall texts for the display and other materials published in print or online in conjunction with the exhibition. The specific focus will be different each time the course is taught.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 510 – PROSEMINAR IN ISLAMIC ART AND ARCHITECTURE**

3 credits.

A rotating topic in Islamic Art and Architectural History

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 515 – PROSEMINAR IN MEDIEVAL ART**

3 credits.

Advanced topics in Medieval Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ART HIST 525 – PROSEMINAR IN ITALIAN RENAISSANCE ART**

3 credits.

Advanced topics in Italian Renaissance Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**ART HIST 535 – PROSEMINAR IN NORTHERN EUROPEAN PAINTING**

3 credits.

Advanced topics in Art History focusing on Northern European Painting taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**ART HIST 555 – PROSEMINAR IN 19TH CENTURY EUROPEAN ART**

3 credits.

Advanced topics in 19th Century European Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ART HIST 556 – PROSEMINAR IN 20TH CENTURY EUROPEAN ART**

3 credits.

Advanced topics in 20th Century European Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 563 – PROSEMINAR IN MATERIAL CULTURE**

3 credits.

Interdisciplinary study of the way people use objects and environments to express identities and relationships in households, communities, and larger social/economic systems.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ART HIST 567 – PROSEMINAR IN AMERICAN ARCHITECTURE**

3 credits.

Advanced topics in Art History focusing on American Architecture taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**ART HIST 569 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists offer interdisciplinary instruction on topics appropriate to their specializations.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**ART HIST 575 – PROSEMINAR IN JAPANESE ART**

3 credits.

Advanced topics in Japanese Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**ART HIST 576 – PROSEMINAR IN CHINESE ART**

3 credits.

Advanced topics in Chinese Art History taught in a seminar-style format.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**ART HIST 579 – PROSEMINAR IN AFRICAN ART**

3 credits.

Study (either thematic or culture-specific) of African arts and architecture in historical and cultural perspectives.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**ART HIST 600 – SPECIAL TOPICS IN ART HISTORY**

3 credits.

Topics will vary as to media, geography, culture, and time frame.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 601 – INTRODUCTION TO MUSEUM STUDIES I**

3 credits.

Introduces the history of museums and collecting; studies and practices in museology and connoisseurship; exhibition planning, research, cataloging, and installation.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART HIST 602 – INTRODUCTION TO MUSEUM STUDIES II**

3 credits.

Implementation of an exhibition, permanent collection installation or another museum-based project. Builds on projects from ART HIST 601.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ART HIST 603 – CURATORIAL STUDIES COLLOQUIUM**

3 credits.

Engage in a broad range of questions, both theoretical and practical, related to curatorial practice through a series of sessions on curatorial strategies. Particular emphasis will be placed on integrative and collaborative approaches to curating a wide variety of material: art, film, music, books, anthropology/culture, archeology, history, geology, zoology, dance, etc. Engage with experts on the theories, objectives, and processes of conceiving, designing, and mounting exhibitions, as well as reaching different audiences with both physical and virtual exhibitions. Also introduces the distinctive collections and resources on campus and in the region.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ART HIST/ASIAN 621 – MAPPING, MAKING, AND REPRESENTING COLONIAL SPACES**

3 credits.

Spatial lagacy of colonialism; explores important ways in which the population, landscape, architecture, and urban environment of colonies were mapped, made, and represented, particularly in the 19th and 20th centuries; theoretical and empirical analyses from diverse disciplines and spatial terrain. Not open to students with credit for LCA 621 prior to Fall 2019.

**Requisites:** Senior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ART HIST/HISTORY/JOURN/L I S 650 – HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA**

3 credits.

History of books and print culture in the West from ancient times to the present. Focus on the influence of reading and writing on social, cultural, and intellectual life. Methodologies, theories, and sources for study of book and print culture history.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ART HIST 691 – SENIOR THESIS**

3-6 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**ART HIST 692 – SENIOR THESIS**

3-6 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**ART HIST 697 – UNDERGRADUATE CURATORIAL STUDIES INTERNSHIP (DIRECTED STUDY)**

1-3 credits.

Internship study in applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities with substantial research components. and have them approved by the instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2021**ART HIST 698 – DIRECTED STUDY**

2-3 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2010**ART HIST 699 – DIRECTED STUDY**

1-3 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ART HIST/CLASSICS 700 – THE ART AND ARCHAEOLOGY OF ANCIENT GREECE**

3 credits.

Explores the art and archaeology of ancient Greece from the Bronze Age through the Hellenistic period.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ART HIST 701 – PRACTICUM IN ART HISTORY: BIBLIOGRAPHY, HISTORIOGRAPHY, METHODS**

3 credits.

Intensive work in critical analysis and research methods; introduction to the methods and historiography of art history; orientation to source work in the Elvehjem collection and in University libraries.

**Requisites:** Declared in Art History graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ART HIST 703 – CURATORIAL STUDIES COLLOQUIUM**

3 credits.

Engage in a broad range of questions, both theoretical and practical, related to curatorial practice through a series of sessions on curatorial strategies. Particular emphasis will be placed on integrative and collaborative approaches to curating a wide variety of material: art, film, music, books, anthropology/culture, archeology, history, geology, zoology, dance, etc. Engage with experts on the theories, objectives, and processes of conceiving, designing, and mounting exhibitions, as well as reaching different audiences with both physical and virtual exhibitions. Also introduces the distinctive collections and resources on campus and in the region.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ART HIST/CLASSICS 704 – THE ART AND ARCHAEOLOGY OF ANCIENT ROME**

3 credits.

Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ART HIST 706 – TOPICS IN AMERICAN ART HISTORY**

3 credits.

Varied topics on American Art History.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2021

**ART HIST 707 – TOPICS IN NINETEENTH-CENTURY EUROPEAN ART**

3 credits.

Topics in specific aspects of 19-century visual culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 712 – TOPICS IN AFRICAN & AFRICAN DIASPORA ART HISTORY**

3 credits.

Topics in African and Diaspora Art.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**ART HIST 715 – TOPICS IN MEDIEVAL ART**

3 credits.

Various themes of current interest in the art, architecture and visual culture of medieval Europe and the Mediterranean (including the Byzantine Empire and Islamic states of the Mediterranean rim).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 731 – TOPICS IN EARLY MODERN ART**

3 credits.

Topics in Early Modern Art.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ART HIST 749 – TOPICS IN ARCHITECTURAL HISTORY**

3 credits.

Topics in Architectural History.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2017



**ART HIST/ANTHRO/DS/HISTORY/LAND ARC 764 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST 775 – TOPICS IN JAPANESE ART HISTORY**

3 credits.

Topics in Japanese Art History.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 776 – TOPICS IN CHINESE ART HISTORY**

3 credits.

Topics in Chinese Art History.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 779 – TOPICS IN ARCHITECTURE & URBANISM OF ASIA**

3 credits.

Topics in Architecture and Urbanism of Asia.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 797 – CURATORIAL STUDIES INTERNSHIPS (DIRECTED STUDY)**

3 credits.

Internship study in applied learning experiences in museums and other curatorial settings. Students must identify internship possibilities with substantial research components and have them approved by the instructor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**ART HIST 799 – INDEPENDENT STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 800 – SEMINAR: SPECIAL TOPICS IN ART HISTORY**

3 credits.

Topics will vary as to media, geography, culture, and time frame.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST/AFROAMER 801 – HISTORIOGRAPHY, THEORY AND METHODS IN VISUAL CULTURE**

3 credits.

Focuses on the knowledge, theories, and methods that are fundamental to the transdisciplinary discipline of Visual Cultures. Develops skills in critical reading, research, analysis, writing, and oral presentation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ART HIST/AFROAMER 802 – VISUAL CULTURES: TOPICS IN VISUAL CULTURES**

3 credits.

Content will vary to facilitate in-depth engagement with a particular topic in Visual Culture. Topics will be pursued with analytic attention to gender, sexuality and race.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ART HIST 805 – SEMINAR-ANCIENT ART AND ARCHITECTURE**

3 credits.

Rotating topics in Ancient Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ART HIST 810 – SEMINAR IN ISLAMIC ART AND ARCHITECTURE**

3 credits.

Rotating topics in Islamic art and architectural history.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 815 – SEMINAR-MEDIEVAL ART**

3 credits.

Rotating topics in Medieval Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ART HIST 835 – SEMINAR-NORTHERN EUROPEAN ART**

3 credits.

Rotating topics in Northern European Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**ART HIST 855 – SEMINAR-19TH CENTURY EUROPEAN ART**

3 credits.

Rotating topics in 19th Century European Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ART HIST 856 – GRADUATE SEMINAR IN TWENTIETH CENTURY EUROPEAN ART**

3 credits.

Rotating topics in 20th Century European Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ART HIST 863 – SEMINAR IN MATERIAL CULTURE**

3 credits.

Interdisciplinary study focusing on the way people use objects and environments to express identities and relationships in households, communities, and larger social/economic systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**ART HIST 865 – SEMINAR-AMERICAN ART**

3 credits.

Rotating topics in American Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**ART HIST 867 – SEMINAR-AMERICAN ARCHITECTURE**

3 credits.

Rotating topics in American Architecture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ART HIST 875 – SEMINAR IN JAPANESE ART**

3 credits.

Rotating topics in Japanese Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ART HIST 876 – SEMINAR IN CHINESE ART**

3 credits.

Rotating topics in Chinese Art.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ART HIST 879 – SEMINAR IN AFRICAN ART**

3 credits.

Critical examination of selected theoretical and methodological issues affecting the study of African art and architecture in their historical and cultural perspectives.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016

**ART HIST 990 – RESEARCH AND THESIS**

3 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## ASIAN AMERICAN STUDIES (ASIAN AM)

**ASIAN AM 101 – INTRODUCTION TO ASIAN AMERICAN STUDIES**

3 credits.

Introduction to the historical, sociological, anthropological, political, and cultural study of Americans of Asian ancestry.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN AM/AFROAMER/AMER IND/CHICLA/FOLKLORE 102 – INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES**

3 credits.

Introduction to comparative ethnic studies, examining race, ethnicity, and indigeneity within the United States. Includes perspectives from African American, American Indian, Asian American, and Chican@ and Latin@ studies.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN AM/DANCE 121 – ASIAN AMERICAN MOVEMENT**

3 credits.

Techniques of exercises and movement forms derived from several Asian cultures as taught in the United States. Studied in the context of the construction and expression of ethnic and cultural identity.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN AM/ENGL 150 – LITERATURE & CULTURE OF ASIAN AMERICA**

3 credits.

Since the 19th century, "America" has often been defined by its relationship with "Asia," through cultural influence, immigration, imperialism, and war. Traces the role of Asia and Asians in American literature and culture, from the Chinese and Japanese cultural influences that helped shape literary modernism to the rise of a distinctive culture produced by Asian immigrants to America and their descendants.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN AM 152 – ASIAN AMERICAN LITERARY AND POPULAR CULTURE: RACE, FANTASY, FUTURES**

3 credits.

Explores fantasy as a conduit of political meaning in Asian American fiction, graphic novels, anime, and art. Analyzes race as it circulates in visual mediums and literary texts. Engages issues such as stereotyping, caricature, and microaggressions; whitewashing, yellowface, and passing; race fetishism; cultural appropriation; multiracialism; kawaii or cute style; techno-orientalism and virtual Asians. Foregrounding fantasies of bodilessness, examine race as it is grafted onto nonhuman forms-objects, digital avatars, robots-at the borders of science and fiction. Examines how projections of the future reflect cultural anxieties about race, immigration, and Asian Americans.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIAN AM/HISTORY 160 – ASIAN AMERICAN HISTORY: MOVEMENT AND DISLOCATION**

3-4 credits.

Examines the impact of colonialism, war, and capitalism on the movement of Asians to the U.S. Considers how racial, gendered, class, sexual, and national formations within the U.S. structured Asian immigration to North America.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN AM/HISTORY 161 – ASIAN AMERICAN HISTORY: SETTLEMENT AND NATIONAL BELONGING**

3-4 credits.

Examines the social, cultural, and political citizenship of Asians in the U.S. with particular emphasis on diaspora, transnationality, and place.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**ASIAN AM 170 – HMONG AMERICAN EXPERIENCES IN THE UNITED STATES**

3 credits.

Explores how Hmong's participation in the Secret War that the U.S. waged in Laos shaped their experiences in the U.S., heightening the importance of Hmong Americans' social, cultural, and political self-definition and in making known their contributions to the advancement of U.S. society.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIAN AM/SOC 220 – ETHNIC MOVEMENTS IN THE UNITED STATES**

3-4 credits.

Sociological analysis of historical and recent ethnic/racial conflict and movements in the U.S., including the relations between European Americans, African Americans, Mexican Americans, Native Americans, and Asian Americans, with additional material on other groups and relations.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN AM 240 – TOPICS IN ASIAN AMERICAN STUDIES**

3 credits.

An examination of specific themes in Asian American life and culture.

Topics may include comparative analyses of Asian American communities, Asian American experience and history, and the specific concerns and histories of Asian groups in the U.S., such as Korean, Hmong, South Asian, Southeast Asian, Chinese, and Japanese.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN AM/ASIAN/HISTORY 246 – SOUTHEAST ASIAN REFUGEES OF THE "COLD" WAR**

4 credits.

In-depth study of the peoples, conflicts, and wars in Cambodia, Laos, and Vietnam, with emphasis on the Cold War era (1945-1990) and on the resulting migration and resettlement of over one million Hmong, Khmer, Lao, and Vietnamese in the United States. Not open to students with credit for LCA 246 prior to Fall 2019.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN AM 250 – EATING ASIAN AMERICA**

3 credits.

Examines the diverse food cultures of Asian America as an entryway to questions about Asian American politics, identities, and histories. Considers Asian American food consumption, labor, and discourses in relation to challenging racism and fighting for belonging in the U.S.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ASIAN AM/ENGL 270 – A SURVEY OF ASIAN AMERICAN LITERATURE**

3 credits.

Survey of Asian American literature from 1880 to present.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022

### **ASIAN AM/AFROAMER/DANCE/FOLKLORE 319 – AFRO ASIAN IMPROV: FROM HIP HOP TO MARTIAL ARTS FUSION**

3 credits.

An Afro Asian perspective provides a lens through which intersections between Asian American and African American dance and martial arts are studied and practiced. Asian American and African American movement genres provide tools to explore dance fusion, choreography, and improvisation, to create dances informed by African American and Asian American legacies of struggle, innovation and transformation, while cognizant of historical forces of oppression and racism. Building connections through respectful communication with others are learned through dance practice, discussion and writing about concepts learned through readings, videos, and guest artist visits. Engagement with dance as a cultural vehicle for creative problem-solving and risk-taking occurs through guided class or smaller group activities.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ASIAN AM/COM ARTS 420 – ASIAN AMERICANS AND MEDIA**

3 credits.

Examines representations of Asian American in American media using historical, analytical, and critical approaches. Issues of cultural production, identity, race, politics, and gender are linked to examinations of specific media forms.

**Requisites:** COM ARTS/CHICLA/COM ARTS 347, ASIAN AM 101, or sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ASIAN AM 441 – HMONG AMERICAN SOCIAL MOVEMENTS IN THE 20TH AND 21ST CENTURIES**

3 credits.

Explores the history and circumstances whereby Hmong Americans came together as a political unit to address the domestic and international concerns of the Hmong American community.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ASIAN AM/ENGL 462 – TOPIC IN ASIAN AMERICAN LITERATURE**

3 credits.

Topics will vary. All topics will emphasize the following learning outcomes: awareness of history's impact on the present, ability to recognize and question assumptions, development of critical thinking skills, awareness of relations between self and others, and effective participation in a multicultural society.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **ASIAN AM/ENGL/GEN&WS 463 – RACE AND SEXUALITY IN AMERICAN LITERATURE**

3 credits.

Explores the intersection between race and sexuality in American literature with an emphasis on sex/gender difference, feminism, transgenderism, and nationalism. Focuses on the nature of literature as advocacy, with an emphasis on Asian-American issues.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### **ASIAN AM/ENGL/GEN&WS 464 – ASIAN AMERICAN WOMEN WRITERS**

3 credits.

Major texts by Asian American women writers.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ASIAN AM/ENGL 465 – ASIAN AMERICAN POETRY**

3 credits.

Throughout the history of Asian America, poetry has been a vehicle for the creation and exploration of an Asian American voice; in poetry we can see the continuing struggle over what form Asian American expression will take. Will it follow Asian or European models? Will it employ traditional forms, or experiment in search of new styles? Will it be individual or collective, introspective or political? We will explore these questions through a study of a wide range of Asian American poets from a variety of historical periods and ethnicities, including Janice Mirikitani, Lawson Fusao Inada, Li-Young Lee, John Yau, Myung Mi Kim, and Linh Dinh.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ASIAN AM 540 – SPECIAL TOPICS**

3 credits.

Themes in Asian American Studies. Topics may include activism, public policy, history, poverty, family, law, immigration, diaspora, refugeeism, gender, sexuality.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN AM 560 – HUMANITIES TOPICS**

3 credits.

Topics in the arts and humanities that illuminate the Asian American experience.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ASIAN AM/JOURN 662 – MASS MEDIA AND MINORITIES**

4 credits.

Representations of minority groups in U.S. news and entertainment mass media. Historical, social, political, economic, and other factors influencing the mass mediated depictions of minorities.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASIAN AM 699 – INDEPENDENT STUDY: DIRECTED READINGS IN ASIAN AMERICAN STUDIES**

1-4 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017

## ASIAN LANGUAGES AND CULTURES (ASIAN)

**ASIAN 100 – GATEWAY TO ASIA: SPECIAL TOPICS**

3-4 credits.

Offers a comparative and interdisciplinary introduction to multiple cultures of Asia. Possible topics include but are not limited to: travelogues; the languages of Asia; food cultures of Asia.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ASIAN/HISTORY 103 – INTRODUCTION TO EAST ASIAN HISTORY: CHINA**

3-4 credits.

Survey of major developments in Chinese history from 1500 B.C. to the founding of the Communist state in 1949. Emphasis on patterns and themes; equal time devoted to the classical and traditional period and the modern era.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



### **ASIAN/HISTORY 104 – INTRODUCTION TO EAST ASIAN HISTORY: JAPAN**

3-4 credits.

Survey of major cultural, social, political and economic developments in Japanese history from ancient to recent times.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ASIAN/HISTORY 108 – INTRODUCTION TO EAST ASIAN HISTORY - KOREA**

3-4 credits.

Survey of major cultural, social, political, and intellectual developments in Korea from the 10th century to the 21st century.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **ASIAN/COUN PSY/ED PSYCH/PSYCH 120 – THE ART AND SCIENCE OF HUMAN FLOURISHING**

3 credits.

Explore perspectives related to human flourishing from the sciences and humanities; investigate themes such as transformation, resilience, compassion, diversity, gratitude, community; expand self-awareness, enhanced social connectivity, and ability to change; formulate a sense of what it means to lead a flourishing life that sustains meaningful and fulfilling engagement with studies, relationships, community, and career.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ASIAN 203 – LOST IN TRANSLATION: WESTERN EXPERIENCE IN ASIA**

3 credits.

An examination of travel narratives, both fiction and non-fiction in print and in film, and the experiences of Western travelers in Asia, with the goal of developing one's own travel writing. Ideal for students with an interest in Asia, have travelled to Asia, or are interested in travelling to Asia.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **ASIAN/RELIG ST 206 – THE QUR'AN: RELIGIOUS SCRIPTURE & LITERATURE**

3 credits.

An introduction to the Qur'an, the sacred scripture of the Islamic religious tradition, focused on Muslim approaches to reading the text, its themes and history, and its use as a source of law, theology, aesthetics, politics, and practices of piety.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **ASIAN/RELIG ST 218 – HEALTH AND HEALING IN SOUTH ASIA**

3-4 credits.

Study primary and secondary sources to explore how South Asian societies have understood the ideas of health and well-being throughout history. We will consider a number of cases that illustrate uniquely South Asian conceptions of illness and physical dysfunction and the ways in which people in South Asia have attempted (and continue to attempt today) to heal bodies. Students will learn about the traditional healing systems of South Asia, including Ayurveda, Siddha, and Unani, the basic components of each systems' ideas about disease pathology and treatment that have been used for centuries to heal illness, maintain good health, and, in some instances, aspire to a state of super-health that transcends the limitations of bodily existence altogether.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ASIAN/RELIG ST 236 – ASIA ENCHANTED: GHOSTS, GODS, AND MONSTERS**

3 credits.

Explores how different cultures in Asia conceive of and relate to the monstrous, ghostly, and divine, both in the past and in the contemporary world. These themes are approached from a range of different disciplinary perspectives, including religious studies, literature, anthropology, and history.

**Requisites:** None

**Course Designation:** Gen Ed – Communication Part B

Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/GEOG/HISTORY/POLI SCI/SOC 244 – INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES**

4 credits.

As an introduction to Southeast Asia, covers the ethnic, cultural, religious, and political histories of the region from the classical states period to the present, with an emphasis on colonialism, nationalism, decolonization, and the emergence of modern political and social systems into the 21st century, including an exposure to region's contemporary literature. Not open to students who completed LCA 244 prior to Fall 2019.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIAN/ASIAN AM/HISTORY 246 – SOUTHEAST ASIAN REFUGEES OF THE "COLD" WAR**

4 credits.

In-depth study of the peoples, conflicts, and wars in Cambodia, Laos, and Vietnam, with emphasis on the Cold War era (1945-1990) and on the resulting migration and resettlement of over one million Hmong, Khmer, Lao, and Vietnamese in the United States. Not open to students with credit for LCA 246 prior to Fall 2019.

**Requisites:** None**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN 252 – CONTEMPORARY INDIAN SOCIETY**

4 credits.

Contemporary Indian society surveyed as the joint product of India's classical heritage and its transformation into a modern post-colonial nation state. The tensions and continuities between the pre-modern and modern will be explored while not shying away from questioning the terminology itself. Not open to students with credit for LCA 252 prior to Fall 2018.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**ASIAN 253 – JAPANESE POPULAR CULTURE**

3 credits.

An introduction to the culture, life-styles and thought of the Japanese people, with frequent reference to their history, literature and art. Not open to students with credit for E ASIAN 253 prior to Fall 2018

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN/HISTORY/POLI SCI 255 – INTRODUCTION TO EAST ASIAN CIVILIZATIONS**

3-4 credits.

Multidisciplinary and historical perspectives on the East Asian civilizations of China, Japan, Korea, Tibet and Mongolia from prehistory to the present, including developments in philosophy, economy, governance, social structure, kinship, geography, etc.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN/HISTORY/RELIG ST 267 – ASIAN RELIGIONS IN GLOBAL PERSPECTIVE**

3-4 credits.

Comparative and thematic introduction to diverse Asian religious traditions, ideas and communities, and their relevance to human societies of the past and present. Not open to students with credit for E ASIAN 267 prior to Fall 2019

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**ASIAN 268 – TIBETAN CULTURES AND TRADITIONS**

3 credits.

Introduction to a wide variety of ancient Tibetan cultural beliefs, practices and motifs that are practiced to this day. Examines topics such as: gender roles and stereotypes in Tibetan society; folk beliefs and practices; astrology, divination, dream interpretation and related issues; art, music and theater; traditional Tibetan medicine and healing practices; and finally, the varied and extensive religious traditions of Tibet in their cultural manifestations. Examines central themes and inquires into the ways it contributes to-or contests-a cultural universe that has direct impact on Tibetan lives.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN/RELIG ST 274 – RELIGION IN SOUTH ASIA**

3 credits.

Introductory survey of Hinduism, Buddhism, Islam, Sikhism, etc., and an examination of the cultural, historical, ritual, and philosophical foundations of South Asian religion. Not open to students with credit for LCA 274 prior to Fall 2019.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020

**ASIAN 277 – KENDO: INTEGRATION OF MARTIAL ARTS AND LIBERAL ARTS**

2 credits.

Kendo practice (martial art) supplemented by lecture describing its historical roots and philosophical background. Not open to students with credit for E ASIAN 277 prior to Fall 2019.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**ASIAN 299 – DIRECTED STUDY**

1-3 credits.

Directed study projects for undergraduate students as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ASIAN 300 – TOPICS IN ASIAN STUDIES**

3 credits.

Selected topics in the study of Asian Languages and Cultures.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN 301 – SOCIAL STUDIES TOPICS IN EAST ASIAN STUDIES**

1-3 credits.

Interdisciplinary approaches to specific social sciences topics in Asian studies. Topics may include comparative analysis of a theme across the countries in Asia or focus on a theme within a single country.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN/RELIG ST 306 – HINDUISM**

3 credits.

A historical survey of Hindu scriptures, rituals, philosophies, and ethics from the ancient to the contemporary world. Concepts such as karma, yoga, and reincarnation will be put in the broader contexts of Hindu theism, worship, and law. Not open to students who completed RELIG ST 355 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN/RELIG ST 307 – A SURVEY OF TIBETAN BUDDHISM**

3 credits.

By studying the distinctively Tibetan forms of Buddhism, we also examine more general issues, such as the relationship between theory and practice, ancient meditation and mind training, the politics of "world making", and the connection between identity and experience. Not open to students with credit for LCA 421 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIAN/HISTORY/RELIG ST 308 – INTRODUCTION TO BUDDHISM**

3-4 credits.

The basic thought, practices and history of Buddhism, including selflessness and relativity, practices of meditation, merit-making and compassion from both local and translocal perspectives. Includes a discussion of Buddhism as a contemporary, North American religion. Not open to students with credit for E ASIAN or LCA 308 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN 310 – INTRODUCTION TO COMICS AND GRAPHIC NOVELS: THEORY, HISTORY, METHOD**

3 credits.

Explores the theory and history of comics, graphic novels, and other media with a comics-like quality from around the world. Our goal is to develop a deeper understanding of comics as a major mode of human communication.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASIAN 311 – MODERN INDIAN LITERATURES**

3 credits.

Introduction to advanced study of modern literatures of India in translation from several languages. Emphasizes literary and critical analysis of short story, novel, poetry, and drama; historical and cultural contexts of literature; and relations and dynamics of multiple literary cultures. Not open to students with credit for LCA 311 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018

**ASIAN/HISTORY 319 – THE VIETNAM WARS**

3-4 credits.

Explores the prolonged cycle of wars in Vietnam and its neighbors, 1940 to date, with due regard for both local and U.S. perspectives.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN/HISTORY 335 – THE KOREAS: KOREAN WAR TO THE 21ST CENTURY**

3-4 credits.

A historical examination of the Korean War and the politics and society of North Korea and South Korea.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIAN/HISTORY 337 – SOCIAL AND INTELLECTUAL HISTORY OF CHINA, 589 AD-1919**

3-4 credits.

The culture of the literati in the T'ang; major trends of Neo-Confucianism during the Sung and Ming; the Confucian response to the West in the nineteenth century; the emergence of the modern Chinese intelligentsia and iconoclasm in the early May Fourth period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN/HISTORY 341 – HISTORY OF MODERN CHINA, 1800-1949**

3-4 credits.

The disintegration of traditional Chinese society under the impact of Western imperialism, the rise of modern Chinese nationalism, and the emergence of modern revolutionary movements and ideologies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN/HISTORY 342 – HISTORY OF THE PEOPLES REPUBLIC OF CHINA, 1949 TO THE PRESENT**

3-4 credits.

The social, economic and political transformation of China under Communism; the role of ideology in contemporary Chinese historical development; the nature of that historical development in the comparative perspective of other post-revolutionary histories.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/RELIG ST 350 – INTRODUCTION TO TAOISM**

3-4 credits.

A study of the writings attributed to Lao-tzu and Chuang-tzu and their concepts, and the history and various aspects of religious Taoism. Consideration is given to Taoist influences on literature. Undergraduate majors register for 4 cr; non- majors and graduate majors register for 3 cr

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**ASIAN 351 – SURVEY OF CLASSICAL CHINESE LITERATURE**

3 credits.

A critical introduction to the literature of China from early texts through the late imperial period. Works include poetry, prose, fiction and drama. Not open to students who completed E ASIAN 351 prior to Fall 2019.

**Requisites:** ASIALANG 102 (or E ASIAN 102 prior to Fall 2019), placement into ASIALANG 201, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIAN 352 – SURVEY OF MODERN CHINESE LITERATURE**

3 credits.

A critical introduction to the literature of China from the 19th through the 21st centuries. Works include poetry, prose, fiction and drama and film adaptations. Not open to students with credit for E ASIAN 352 prior to Fall 2019.

**Requisites:** ASIALANG 102 or 356 (E ASIAN 102 or 312 prior to Fall 2019) or placement into ASIALANG 201

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASIAN 353 – LOVERS, WARRIORS AND MONKS: SURVEY OF JAPANESE LITERATURE

3 credits.

Historical introduction to the important literary works of Japan, generally about courtly romance, idealized warriors, and the Buddhist search for enlightenment. This course will cover the classical period, from the eighth through the mid-nineteenth century; most material comes from the particularly wonderful tenth through sixteenth centuries. Not open to students with credit for E ASIAN 353 prior to Fall 2019.

**Requisites:** ASIALANG 104 or 356 (or E ASIAN 104 or 312 prior to Fall 2019) or placement into ASIALANG 203. Not open to students with credit for LITTRANS 263

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ASIAN 354 – EARLY MODERN JAPANESE LITERATURE

3 credits.

An extensive overview of the literature during Japan's early modern or Edo period (1600-1868). The main goal of the course is to introduce one of the world's great cultures through its literature during a period that many people consider to be the culmination of a millennium of cultural development prior to Japan's forced opening to the West in the second half of the nineteenth century. To this end we will read snippets from vastly popular works in the major genres of comic books, novellas, essays, poetry, kabuki and puppet plays and so on, concentrating on the eighteenth and nineteenth centuries. Some key questions in this course include: What is early modernity? What is literature? What is Japanese about these materials? Not open to students with credit for E ASIAN 354 prior to Fall 2019

**Requisites:** E ASIAN 104

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### ASIAN 355 – MODERN JAPANESE LITERATURE

3 credits.

Covers Japanese literature from the late nineteenth through the present century. Not open to students with credit for E ASIAN 354 prior to Fall 2019.

**Requisites:** ASIALANG 104 or 356 (E ASIAN 104 or 320 prior to Summer 2019) or placement into ASIALANG 203

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ASIAN 357 – JAPANESE GHOST STORIES

3 credits.

Surveys Japanese ghost stories in translation from a range of eras and media, including theater and film. Considers historical origins and reception, with particular emphasis on storytelling and adaptation across formats.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### ASIAN 358 – LANGUAGE IN JAPANESE SOCIETY

3 credits.

Enhances knowledge of and sensitivity towards social factors that influence how Japanese language is used in different contexts. Topics include language standardization and policies, dialects, gender differences, multilingualism, translation, and impact of technology on language. In addition to discussing books and articles on these subject matters, engage in the collaborative analysis of actual examples of Japanese language use taken from everyday interactions, interviews, traditional and social media discourse, popular culture, and public signage, among others. Through this process, evaluate critically taken-for-granted beliefs and assumptions about the Japanese language and its users; examine how particular beliefs and assumptions have been established, maintained, and challenged; and make informed choices in adopting different styles of language and in positioning themselves in a Japanese speech community. Not open to students with credit for E ASIAN 358 prior to Fall 2019.

**Requisites:** ASIALANG 104 or 356 (E ASIAN 104 or 320 prior to Summer 2019) or placement into ASIALANG 203

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASIAN 361 – LOVE AND POLITICS: THE TALE OF GENJI

3 credits.

Explores the themes, structure, and reception history of Japan's The Tale of Genji (ca. 1008). Not open to students with credit for E ASIAN 361 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/HISTORY 363 – CHINA AND WORLD WAR II IN ASIA**

3-4 credits.

This course is intended to help students understand World War II from the perspective of Asia. The focus is not only on the American and Japanese roles in the war but also on lesser, often overlooked participants such as China, Korea, and Southeast Asia. The course will focus not only on the diplomatic, political, and military situation of wartime Asia, but also on perceptions and experiences of the war from those most heavily affected by it: those experiencing it on the ground. Understanding this war is critical for helping us understand contemporary Asia. The foundations of the Cold War and the post-Cold War world that we live in today were forged on battlefields in mainland China, Burma, small islands in the Pacific, and in the skies over the archipelago of Japan. In order to provide the background and understand the legacies, this course covers an extended time frame, beginning in the 19th century with the arrival of the West in Asia and continues into the 1950s.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASIAN 367 – HAIKU**

3 credits.

Introduction to the haiku, one of the world's great verseforms, in its original Japanese context. Debunks the notion of the haiku as a traditional form of Zen Japanese micropoetry, instead arguing that it was an "invented tradition," a late nineteenth-century Japanese response to modernization and westernization. Not open to students with credit for E ASIAN 367 prior to Fall 2018

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASIAN/AFRICAN/RELIG ST 370 – ISLAM: RELIGION AND CULTURE**

3-4 credits.

The emergence and development of Islam; schism; theology; asceticism; speculative and popular mysticism; literatures in diverse Islamic languages. Not open to students with credit for LCA 370 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**ASIAN 371 – TOPICS IN CHINESE LITERATURE**

2-3 credits.

Literary or cultural study of a particular theme, work, period, or genre in Chinese literature. Possible topics include: Confucian Analects, The Dream of the Red Chamber, Journey to the West, or Traditional Chinese Drama. Translations serve as the principal texts, but students of Chinese are required to do some reading in the original.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN 372 – TOPICS IN CHINESE: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ASIAN 373 – TOPICS IN JAPANESE: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ASIAN 375 – SURVEY OF CHINESE FILM**

3 credits.

A historical narrative of Chinese-language film from the turn of the century to contemporary China, Taiwan, and Hong Kong. All films include English subtitles. No knowledge of Chinese language is required. Not open to students with credit for E ASIAN 520 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021



**ASIAN 376 – MANGA**

3 credits.

Surveys the manga (Japanese comicbook) from its precursors in premodern woodblock-printed booklets to its contemporary manifestations in subgenres like shonen, gekiga, mecha, and shojo. Draws upon critical writings on visual culture, literature, and visual-verbal narrative. Not open to students with credit for E ASIAN 376 prior to Fall 2019

**Requisites:** ASIALANG 104 (or E ASIAN 104 prior to Summer 2019) or placement into ASIALANG 203

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ASIAN 378 – ANIME**

3 credits.

Surveys anime (Japanese animation) from 1930s shorts through contemporary feature-length, experimental, and televised serial-form productions. Draws on critical writings on postmodernism, digital cinema, and visual culture. Some Japanese language ability is required. Not open to students with credit for E ASIAN 378 prior to Fall 2019.

**Requisites:** ASIALANG 104 (or E ASIAN 104 prior to Fall 2019) or placement into ASIALANG 203

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIAN/ART HIST 379 – CITIES OF ASIA**

3 credits.

Historical overview of the built environment of cities of Asia from antiquity to the present; architectural and urban legacy in its social and historical context; exploration of common themes that thread through the diverse geographical regions and cultures of Asia. Not open to students with credit for LCA 379 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIAN 403 – SOUTHEAST ASIAN LITERATURE**

3 credits.

An introduction to the societies, politics and cultures of Southeast Asia through modern literature. Fiction, testimony, poetry and ephemeral materials will be read alongside literary analysis to understand the roles of writing and art in social and political transformation. Topics will include revolution and uprising; violence and war; environment, migration and displacement; gender and sexuality; censorship and what cannot be written; and cities, the countryside and the spaces between them. Not open to students with credit for LCA 403 prior to Fall 2018

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/RELIG ST 405 – GODS AND GODDESSES OF SOUTH ASIA**

3 credits.

Introduces some of the most important deities of South Asia through visual representation, mythical narratives and rituals of worship. Topics include the development of iconographic forms and concepts, masculine and feminine aspects of the divine, the belief in human embodiments of divinities, the phenomenon of possession, modes of domestic and public worship and the symbolism of the temple structure.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/ART HIST 428 – VISUAL CULTURES OF INDIA**

3 credits.

Concentrates on image complexes (art, photography, and cinema) and visual environments (architecture, urban planning, and public rituals) of India; examination of visual culture through thematic issues such as, sexuality, patronage, cultural encounter, transculturation, ways of viewing, modernism, and nationalism. Not open to students with credit for LCA 428 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ASIAN/RELIG ST 430 – INDIAN TRADITIONS IN THE MODERN AGE**

3 credits.

Explores how ancient Indian traditions have been reframed for the modern age. Topics include the Ramayana in popular media, negotiations over sacred spaces, and popular Tantra. We will also examine recent controversies, such as the one surrounding the ancient Jain practice of fasting until death (sallekhana) in the modern age.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**ASIAN 432 – INTRODUCTION TO CHINESE LINGUISTICS**

3 credits.

Provides an introductory overview of the Chinese language from a contemporary perspective. Covers various topics including phonetics, phonology, dialects, morphology, syntax, orthography, semantics, and pragmatics. Not open to students with credit for E ASIAN 432 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIAN 433 – TOPICS IN EAST ASIAN VISUAL CULTURES**

3 credits.

Topics in the study of the visual cultures of East Asia from antiquity to the present. Focuses on illustrative texts and genres, major historiographic, theoretical, and methodological issues, and the technologies of vision and visuality in China, Japan, and Korea.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN 434 – INTRODUCTION TO JAPANESE LINGUISTICS**

3 credits.

Phonology, morphology and syntax of the modern standard colloquial Japanese, including historical and dialectal aspects. Not open to students with credit for E ASIAN 434 prior to Fall 2019.

**Requisites:** ASIALANG 104 or 356 (E ASIAN 104 or 320 prior to Summer 2019) or placement into ASIALANG 203**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ASIAN/HISTORY/RELIG ST 438 – BUDDHISM AND SOCIETY IN SOUTHEAST ASIAN HISTORY**

3–4 credits.

Theravada Buddhism in Southeast Asia; ideas and basic tenets; history and its impact on social and political institutions; the monastic order and relations with the states; roles in the early history up to the present; focus on Thailand, Burma and Cambodia. Not open to students with credit for LCA 438 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2014**ASIAN/COM ARTS 443 – INDIAN CINEMA AND BEYOND**

3 credits.

India is home to one of the largest film industries in the world, Bollywood. Beyond Bollywood, India has a thriving film culture that caters to its many regional languages. Explore India's diverse, yet interconnected film and media cultures including Bollywood, and regional film industries such as Tamil, Bengali, Telugu and Malayalam. Examine film-industry formations, questions of genre, style and auteurship, ethnic conflicts, gender non-conformity, caste, settler colonialism, censorship and linguistic nationalism that shape cinematic discourses in the country.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ASIAN/RELIG ST 444 – INTRODUCTION TO SUFISM (ISLAMIC MYSTICISM)**

3 credits.

The rise and development of mysticism in Islam; basic Sufi doctrines, values and practices; life and works of important speculative and popular Sufi saints; Sufi brotherhoods in the Middle East, South Asia and North Africa. Not open to students with credit for LCA 444 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**ASIAN/HISTORY 454 – SAMURAI: HISTORY AND IMAGE**

3–4 credits.

Japanese warriors, their ideals, and their images from the tenth century to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016

### **ASIAN/HISTORY 456 – PEARL HARBOR & HIROSHIMA: JAPAN, THE US & THE CRISIS IN ASIA**

3-4 credits.

Events leading to the Pearl Harbor attack, the conduct of World War II in the Pacific, the nature of the wartime Japanese state and effects of the war on Japanese society, the dropping of the atomic bombs, and Japan's decision to surrender. The war as an epoch in Japanese history.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **ASIAN/HISTORY 458 – HISTORY OF SOUTHEAST ASIA SINCE 1800**

3-4 credits.

Effects of the modern Western revolution on the established societies of Southeast Asia through colonial rule and economic and cultural change. Not open to students with credit for LCA 458 prior to Fall 2018.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **ASIAN/RELIG ST 460 – THE HISTORY OF YOGA**

3 credits.

Explores the history of Yoga techniques from the ancient to the modern period. Not open to students with credit for RELIG ST 623 prior to Spring 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ASIAN/HISTORY 463 – TOPICS IN SOUTH ASIAN HISTORY**

3 credits.

Topics vary related to the History of South Asia, Eurasia, and the Indian Ocean.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

### **ASIAN/RELIG ST 466 – BUDDHIST THOUGHT**

3 credits.

Survey of the fundamental trends in Buddhist thought through the works of major philosophers. Themes include the concept of "selflessness" and concomitant theories of essencelessness, perception, language and rationality. Not open to students with credit for E ASIAN or LCA 466 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **ASIAN/RELIG ST 473 – MEDITATION IN INDIAN BUDDHISM AND HINDUISM**

3 credits.

Examines contemplative practices in the two major Indian religions, Buddhism and Hinduism. Covers practices described in ancient texts but also provides an overview of selected modern practices.

**Requisites:** Sophomore standing (not open to students with credit for LCA 624 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ASIAN/ENGL 478 – INDIAN WRITERS ABROAD: LITERATURE, DIASPORA AND GLOBALIZATION**

3 credits.

Study of literature, drama, and film produced by authors of South Asian origin in Europe, North America, and the Caribbean. Course considers theories of diaspora, changing patterns of subcontinental migration, and relation of diasporic forms to the cultures of origin and adoption. Not open to students with credit for LCA 478 prior to Fall 2019.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ASIAN/RELIG ST 505 – THE PERFECTIBLE BODY IN RELIGIONS, MEDICINES, AND POLITICS**

3 credits.

Looking at the cultural institutions of politics, medicine, and religion in multiple cultures and historical times, students will explore ideas about what constitutes a perfect body, how and why different parts of the body are privileged over others, and how and why the notion of bodily perfectibility differs for men and women, children and adults, and humans and gods. Readings encourage such questions as: Is the perfect body attainable and, if so, how? And, who benefits from bodily perfection (or the rhetoric of the bodily perfection)? We will ask these questions with comparative intent: we want both to learn about cultures other than our own and, in the process of understanding the other, we will ask how this new knowledge might empower us to be more observant and critical of the role(s) and treatment of the body in our own society historically and today.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ASIAN 533 – READINGS IN EARLY MODERN JAPANESE LITERATURE**

3 credits.

Provides an extensive overview of the literature during Japan's early modern or Edo period (1600-1868). The main goal of the course is to introduce students to the literature of this period through readings in the original early modern Japanese language.

**Requisites:** ASIALANG 404 and 313 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ASIAN 563 – READINGS IN MODERN JAPANESE LITERATURE**

3 credits.

Extensive readings in modern Japanese literature and discussion of literary content.

**Requisites:** ASIALANG 303 (or E ASIAN 303 prior to Fall 2019) or placement into ASIALANG 304**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN 568 – STUDY ABROAD IN RELIGIONS AND PHILOSOPHIES**

2-6 credits.

Study of religions and philosophies offered by a UW-approved study-abroad program outside the United States.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ASIAN 571 – READINGS IN CLASSICAL CHINESE LITERATURE**

1-3 credits.

Extensive readings in classical Chinese literature, including poetry and prose. Students may repeat this course if the topic is different.

**Requisites:** ASIALANG 312 or 316 (or E ASIAN 322 or 342 prior to Fall 2019)**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions**Last Taught:** Fall 2016**ASIAN 573 – READINGS IN CLASSICAL JAPANESE LITERATURE**

3 credits.

Extensive readings in early Modern or Classical Japanese literature, and discussion of visual-verbal content. Students may repeat this course if the topic is different.

**Requisites:** ASIALANG 303 (or E ASIAN 303 prior to Fall 2019) or placement into ASIALANG 304**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASIAN 600 – CAPSTONE SEMINAR IN ASIAN HUMANITIES**

3 credits.

An examination of methodological and theoretical issues in Asian humanities, with emphasis on literary, religious, and cultural studies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

### ASIAN/ART HIST 621 – MAPPING, MAKING, AND REPRESENTING COLONIAL SPACES

3 credits.

Spatial lagacy of colonialism; explores important ways in which the population, landscape, architecture, and urban environment of colonies were mapped, made, and represented, particularly in the 19th and 20th centuries; theoretical and empirical analyses from diverse disciplines and spatial terrain. Not open to students with credit for LCA 621 prior to Fall 2019.

**Requisites:** Senior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### ASIAN 630 – PROSEMINAR: STUDIES IN CULTURES OF ASIA

3 credits.

Advanced topics in Asian studies.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ASIAN 631 – HISTORY OF THE CHINESE LANGUAGE

3 credits.

Introduction to Chinese historical linguistics, including the sound systems of the Shih-ching, T'ang poems, and Yuan songs, and their historical relations to the sounds of modern Mandarin, and syntactic interaction between classical and vernacular Chinese. Not open to students with credit for E ASIAN 631 prior to Fall 2019.

**Requisites:** ASIALANG 102 or 356 (E ASIAN 102 or 312 prior to Fall 2019) or placement into ASIALANG 201

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ASIAN 632 – STUDIES IN CHINESE LINGUISTICS

3 credits.

Development and exchange of scholarly information on specific topics in the field of linguistics. It rotates between various topics about the Chinese language from contemporary perspectives. It may focus on phonetics, phonology, morphology, syntax, semantics, pragmatics, sociolinguistics, applied linguistics, second language acquisition, or discourse analysis. The mastery of the knowledge learned in this course is essential for further study in Chinese linguistics.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ASIAN 633 – CHINESE APPLIED LINGUISTICS

3 credits.

Subfields of applied linguistics in Chinese such as sociolinguistics, pragmatics, corpus linguistics, language pedagogy, second language acquisition, etc.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### ASIAN 641 – HISTORY OF CHINESE LITERATURE I

3 credits.

Covers the history of Chinese literature from the Zhou through the end of the Yuan, focusing primarily on poetic and prose genres. Primary source readings will be in Chinese, with additional critical assessment of published translations; secondary source readings in both Chinese and English.

**Requisites:** ASIALANG 301, placement into ASIALANG 302, or graduate/professional standing. Not open to students with credit for E ASIAN 651 prior to Fall 2019.

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 642 – HISTORY OF CHINESE LITERATURE II**

3 credits.

Covers the history of Chinese-language literature from the late imperial period through today. The primary focus will be on prose fiction, with additional coverage of the development of major forms such as spoken drama, free-verse poetry, and modern criticism. In exploring these genres and forms, special attention given to issues of language, representation, and politics. The majority of readings will be in Chinese.

**Requisites:** ASIALANG 301 or placement into ASIALANG 302

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIAN/RELIG ST 650 – PROSEMINAR IN BUDDHIST THOUGHT**

2-3 credits.

Advanced topics in theories focused on the mechanisms of contemplative practices such as mindfulness, focused attention and compassion practices, with special emphasis on the interaction of traditional theories from contemplative traditions such as Buddhism and more recent theoretical accounts in psychology and cognitive science.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 655 – ETHNOGRAPHY IN ASIA**

3 credits.

From Greek *ethnos*, "folk" + *grapho*, "to write," doing ethnography involves writing about people, societies, and cultures. It is a qualitative, rather than a quantitative, type of research. One does ethnography, and thus it's a process. But an ethnography is also a product: the outcome of the ethnographic process is an ethnography. In-depth studies and discussions of classic and contemporary ethnographies in multiple Asian contexts that focus on themes like religion, health, economics, and sexuality in writing, photography, and film at once illustrate various methods involved in doing ethnography and illuminate why scholars have for decades studied and represented Asia through ethnography. The methods of ethnography are never divorced from the motivations of the scholars, and thus it is crucial to probe critically and collectively what ethnography is (theory), how it is done (practice), and why it is worth doing generally and in Asian contexts in particular.

**Requisites:** Senior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 671 – LITERARY STUDIES IN CHINESE DRAMA**

3 credits.

An in-depth study of selected texts of and about traditional Chinese drama, from the Yuan dynasty through the twentieth century. Recordings of related performances will be viewed whenever possible, and supplemented with discussion of the social contexts of actors, audiences, and theaters. Readings and viewings will be conducted in the original Chinese, supplemented by English translations when available. Not open to students with credit for E ASIAN 671 prior to Fall 2019.

**Requisites:** ASIALANG 302 (or E ASIAN 302 prior to Fall 2019)

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ASIAN 672 – STUDIES IN CHINESE FICTION**

3 credits.

Intensive study of selected short story and novel texts from the xiaoshuo tradition. In addition to the primary texts, traditional and modern audience reception, criticism, and adaptations will be discussed. Readings will be conducted in the original Chinese, supplemented by English translations when available. The course can be repeated if the topic differs.

**Requisites:** ASIALANG 311 (or E Asian 302 prior to Fall 2019) or

graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ASIAN 681 – SENIOR HONORS THESIS**

3 credits.

Students engage in an independent research under the guidance of a faculty advisor. Students must be enrolled in Honors in the Major or Honors in the Liberal Arts.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 682 – SENIOR HONORS THESIS**

3 credits.

Second semester is devoted to writing the thesis paper under the guidance of a faculty advisor. Students must be enrolled in Honors in the Major or Honors in the Liberal Arts.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ASIAN 691 – SENIOR THESIS**

3 credits.

The senior thesis involves research conducted in collaboration with a faculty member (non-honors student).

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2003

**ASIAN 692 – SENIOR THESIS**

3 credits.

The senior thesis involves research conducted in collaboration with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 1996

**ASIAN 698 – DIRECTED STUDY**

2-3 credits.

Directed study offers the student an opportunity to work with a faculty member on an individual study program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ASIAN 699 – DIRECTED STUDY**

2-3 credits.

Offers the student an opportunity to work with a faculty member on an individual study program. Students must have junior or senior standing.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 700 – TEACHING ASIAN LANGUAGES**

2-3 credits.

Theoretical background and recent trends in foreign language teaching. Teaching of the four skills (speaking, listening, reading and writing) and culture, developing curricula and lesson plans, and assessment to help you develop a repertoire of teaching techniques and strategies.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ASIAN 701 – PROSEMINAR IN CHINESE LITERATURE**

3 credits.

Acquaints entering graduate students with the history of the study of Chinese literature in the West, with the basic reference tools and methodologies, and with the various critical approaches to Chinese literature. BA in Chinese or equiv

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 712 – TEACHING OF CHINESE**

3 credits.

Methods of teaching Chinese as a second language including comparative study of Chinese and English structure, introduction to teaching techniques. Not open to students with credit for E ASIAN 622 prior to Fall 2019.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 713 – TEACHING OF JAPANESE AS A FOREIGN LANGUAGE**

3 credits.

Methods of foreign language teaching in general and Japanese language teaching in particular; with emphasis on special problems in teaching Japanese to English-speaking students. Not open to students with credit for E ASIAN 623 prior to Fall 2019.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIAN 741 – STUDIES IN CHINESE SYNTAX AND MORPHOLOGY**

3 credits.

Syntax and morphology of a selected corpus of Chinese texts.

**Requisites:** ASIAN 432 (E ASIAN 432 prior to Fall 2019)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ASIAN 761 – STUDIES IN CHINESE HISTORICAL TEXTS**

3 credits.

Selected readings from various histories prior to the twentieth century.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ASIAN 762 – STUDIES IN CHINESE PHILOSOPHICAL TEXTS**

3 credits.

Intensive study of such topics as Confucius' Analects, the Zhuangzi, or other significant texts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**ASIAN 763 – STUDIES IN JAPANESE LITERATURE**

3 credits.

One of the general fields such as theater, fiction, etc., studied intensively.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ASIAN 775 – JAPANESE APPLIED LINGUISTICS**

3 credits.

One of the general fields such as discourse analysis, sociolinguistics, pragmatics, language pedagogy, etc.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 799 – READING FOR RESEARCH**

1-3 credits.

Under the guidance of their advisors and other committee members, students compile reading lists for their defined preliminary exam fields and read essential sources and scholarship from those lists. They will demonstrate their critical reading of this material in meetings with the advisor or other committee members.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 815 – SEMINAR: INTERDISCIPLINARY APPROACHES TO ASIA**

3 credits.

An overview of current research being done on Asia in a variety of different disciplines.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ASIAN 833 – TOPICS IN EAST ASIAN VISUAL CULTURES**

3 credits.

Topics in the study of the visual cultures of East Asia from antiquity to the present. Focuses on illustrative texts and genres, major historiographic, theoretical, and methodological issues, and the technologies of vision and visibility in China, Japan, and Korea.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN/HISTORY 857 – SEMINAR-HISTORY OF INDIA (SOUTH ASIA)**

1-3 credits.

Emphasis upon handling of research problems. Focus upon methods, resources, intellectual approaches, and changing interpretations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**ASIAN 873 – SEMINAR IN LANGUAGES AND LITERATURES OF ASIA**

3 credits.

Explore topics in comparative, connected, and/or trans-Asian literatures and languages. Important thinkers and movements in Asian history will be examined and discussed. Through close readings and discussion, presentations, and writing probe vital theories, methodologies, and critical themes in Asian Studies research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 4 number of completions

**Last Taught:** Fall 2020

**ASIAN 932 – SEMINAR IN CHINESE LINGUISTICS**

2-3 credits.

Rotating subjects in the study of Chinese Linguistics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 951 – SEMINAR IN CHINESE LITERATURE**

3 credits.

Rotating subjects in the study of Chinese Literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ASIAN 971 – SEMINAR IN CHINESE THOUGHT**

3 credits.

Rotating subjects relating to Chinese philosophies and religions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**ASIAN 990 – THESIS RESEARCH**

3 credits.

Research in connection with the doctoral thesis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIAN 999 – INDEPENDENT RESEARCH**

1-3 credits.

Independent research for graduate students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## ASIAN LANGUAGES AND CULTURES: LANGUAGES (ASIALANG)

**ASIALANG 101 – FIRST SEMESTER CHINESE**

4 credits.

Introduces the sounds, basic grammar along with 400 characters of standard spoken Chinese. It also teaches beginner-level communication skills in everyday life.

**Requisites:** Not open to students with credit for ASIALANG 111 (or E ASIAN 101 or 122 prior to Fall 2019)

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 102 – SECOND SEMESTER CHINESE**

4 credits.

Introduces the basic grammar along with 400 Chinese characters of standard spoken Chinese. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 101 or 111 (or E Asian 101 or 122 prior to Fall 2019) or placement into ASIALANG 102. Not open to students with credit for E ASIAN 102 prior to Fall 2019

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 103 – FIRST SEMESTER JAPANESE**

4 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) to communicate in Japanese in basic everyday situations. No previous knowledge of Japanese expected. Not open to students with credit for E ASIAN 103 prior to Summer 2019).

**Requisites:** Not open to students who have completed ASIALANG 114 (or E ASIAN 124 prior to Summer 2019)

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 104 – SECOND SEMESTER JAPANESE**

4 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) to communicate in Japanese in basic everyday situations. Continuation of skill development from ASIALANG 103. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 104 prior to Summer 2019.

**Requisites:** ASIALANG 103 or 114 (E ASIAN 103 or 124 prior to Summer 2019) or placement into ASIALANG 104

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 105 – FIRST SEMESTER KOREAN**

4 credits.

Provides students with basic conversation skills and grammatical patterns, assuming that students have no or little previous background knowledge of the Korean language. The learning goal of the course is to equip students with communicative skills in speaking, listening, reading, and writing at a basic level in Korean; Using contemporary standard Korean, students will learn how to express simple ideas such as attributes, identities, locations, time, daily activities, weekend plan, desires, as well as how to combine simple ideas in a various way. Not open to students who completed E ASIAN 105 prior to summer 2019.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 106 – SECOND SEMESTER KOREAN**

4 credits.

Essentials of modern spoken and written Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 106 prior to Summer 2019

**Requisites:** ASIALANG 105 (E ASIAN 105 prior to Summer 2019) or placement into ASIALANG 106**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 110 – ELEMENTARY CHINESE I**

2 credits.

Introduction to the fundamental phonetic system and grammar of standard spoken Chinese along with 200 characters. Not open to students with credit for ASIALANG 101 (or E ASIAN 101 or 121 prior to Fall 2019).

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ASIALANG 111 – ELEMENTARY CHINESE II**

2 credits.

Introduction to the fundamental phonetic system and grammar of standard spoken Chinese along with 200 characters. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 110 (E ASIAN 121 prior to Fall 2019) or placement into ASIALANG 111. Not open to students with credit for ASIALANG 101 (or E ASIAN 101 or 122 prior to Fall 2019)**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ASIALANG 113 – FIRST SEMESTER ELEMENTARY JAPANESE**

2 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) to communicate in Japanese in basic everyday situations.

**Requisites:** Not open to students with credit for ASIALANG 103 (or E ASIAN 103 prior to Summer 2019)**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 114 – SECOND SEMESTER ELEMENTARY JAPANESE**

2 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) to communicate in Japanese in basic everyday situations. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 113 (or E ASIAN 123 prior to Summer 2019) or placement into ASIALANG 114. Not open to students who have completed ASIALANG 103 (or E ASIAN 103 prior to Summer 2019)**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 121 – FIRST SEMESTER ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ASIALANG 122 – SECOND SEMESTER ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 302 prior to Fall 2019.

**Requisites:** ASIALANG 121 (or LCA LANG 301 prior to Fall 2019)**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022

**ASIALANG 123 – FIRST SEMESTER FILIPINO**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 305 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 124 – SECOND SEMESTER FILIPINO**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 306 prior to Fall 2019.

**Requisites:** ASIALANG 123 (or LCA LANG 123 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 124

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 125 – FIRST SEMESTER HMONG**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 307 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 126 – SECOND SEMESTER HMONG**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 308 prior to Fall 2019.

**Requisites:** ASIALANG 125 (or LCA LANG 307 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 126

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 127 – FIRST SEMESTER INDONESIAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 309 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 128 – SECOND SEMESTER INDONESIAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 310 prior to Fall 2019.

**Requisites:** ASIALANG 127 (or LCA LANG 309 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 128

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 129 – FIRST SEMESTER THAI**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 317 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 130 – SECOND SEMESTER THAI**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 318 prior to Fall 2019.

**Requisites:** ASIALANG 129 (or LCA LANG 317 prior to Fall 2019) or placement into ASIALANG 130

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 131 – FIRST SEMESTER VIETNAMESE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 319 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 132 – SECOND SEMESTER VIETNAMESE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 320 prior to Fall 2019.

**Requisites:** ASIALANG 131 (or LCA LANG 319 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 132

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 133 – FIRST SEMESTER HINDI**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 353 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 134 – SECOND SEMESTER HINDI**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 354 prior to Fall 2019.

**Requisites:** ASIALANG 133 (or LCA LANG 353 prior to Fall 2019) or placement into ASIALANG 134

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 135 – FIRST SEMESTER MODERN TIBETAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 369 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 136 – SECOND SEMESTER MODERN TIBETAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 370 prior to Fall 2019.

**Requisites:** ASIALANG 135 (or LCA LANG 369 prior to Fall 2019) or placement into ASIALANG 136

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 137 – FIRST SEMESTER PERSIAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 363 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 138 – SECOND SEMESTER PERSIAN**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 364 prior to Fall 2019.

**Requisites:** ASIALANG 137 (or LCA LANG 363 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 138

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**ASIALANG 139 – FIRST SEMESTER URDU**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 371 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 140 – SECOND SEMESTER URDU**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 372 prior to Fall 2019.

**Requisites:** ASIALANG 139 (or LCA LANG 371 prior to Fall 2019) or ASIALANG 355 or placement into ASIALANG 140

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 141 – FIRST SEMESTER SANSKRIT**

3-4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing using communicative approaches. Not open to students with credit for LCA LANG 375 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 142 – SECOND SEMESTER SANSKRIT**

3-4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 376 prior to Fall 2019.

**Requisites:** ASIALANG 141 (or LCA LANG 375 prior to Fall 2019)

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 143 – FIRST SEMESTER BURMESE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 303 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 144 – SECOND SEMESTER BURMESE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 304 prior to Fall 2019.

**Requisites:** ASIALANG 143 (or LCA LANG 303 prior to Fall 2019)

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 145 – FIRST SEMESTER KHMER**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Not open to students with credit for LCA LANG 313 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ASIALANG 146 – SECOND SEMESTER KHMER**

4 credits.

Proficiency at the elementary level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 314 prior to Fall 2019.

**Requisites:** ASIALANG 145 (or LCA LANG 313 prior to Fall 2019) or ASIALANG 355

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ASIALANG 201 – THIRD SEMESTER CHINESE**

4 credits.

Introduces intermediate-level communication skills in varying Chinese settings. Students will learn a wide range of vocabulary, grammar structure and pragmatic usage in situated dialogues. They will improve four language skills (listening, speaking, reading and writing) and pragmatic competence through interactive and meaningful in-class activities and after-class assignments. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 102 (or E ASIAN 102 prior to Fall 2019) or placement into ASIALANG 201. Not open to students with credit for E ASIAN 201 prior to Fall 2019.

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 202 – FOURTH SEMESTER CHINESE**

4 credits.

Introduces intermediate-level communication skills in varying Chinese settings. Students will learn a wide range of vocabulary, grammar structure and pragmatic usage in situated dialogues. They will improve four language skills (listening, speaking, reading and writing) and pragmatic competence through interactive and meaningful in-class activities and after-class assignments. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 201 (or E ASIAN 201 prior to Fall 2019) or placement into ASIALANG 202. Not open to students who completed E ASIAN 202 or 317 prior to Fall 2019.

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 203 – THIRD SEMESTER JAPANESE**

4 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) and Japanese culture. Continuation of skill development from elementary language courses reviewing, reinforcing and expanding grammar, kanji and vocabulary/ expressions. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 203 prior to Summer 2019.

**Requisites:** ASIALANG 104 or 356 (E ASIAN 104 or 320 prior to Summer 2019) or placement into ASIALANG 203

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 204 – FOURTH SEMESTER JAPANESE**

4 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) and Japanese culture. Continuation of skill development from ASIA LANG 203. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 204 prior to Summer 2019.

**Requisites:** ASIALANG 203 (E ASIAN 203 prior to Summer 2019) or ASIALANG 357 (or E ASIA 327 prior to Summer 2019) or placement into ASIALANG 204

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 205 – THIRD SEMESTER KOREAN**

4 credits.

Focus on two areas of Korean language learning (listening speaking) so that students can understand and express themselves in contemporary Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 345 prior to Summer 2019.

**Requisites:** ASIALANG 106 (or E ASIAN 106 prior to Summer 2019) or placement into ASIALANG 205

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 206 – FOURTH SEMESTER KOREAN**

4 credits.

Further practice in speaking, reading and writing Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 346 prior to Summer 2019.

**Requisites:** ASIALANG 205 (E ASIAN 345 prior to Summer 2019) or placement into ASIALANG 206

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 211 – HERITAGE CHINESE I**

3 credits.

Introduces functional vocabulary and grammar, various cultural related topics, reading skills, and writing techniques. Designed for heritage Chinese learners who possess speaking and listening skills but little or no reading/writing skills in Chinese. These learners include those who were born in a non-Chinese-speaking country, but were raised in a home where Mandarin or another dialect was spoken, and those who were born in a Chinese-speaking country but received zero or limited formal education in that country. Students should contact the department about placement. Not open to students with credit for E ASIAN 113 or 213 prior to fall 2019.

**Requisites:** Consent of instructor**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ASIALANG 212 – HERITAGE CHINESE II**

3 credits.

Emphasizes reading and writing skills. Students will acquire a wide range of vocabulary, grammatical points and sentence patterns from a variety of readings about Chinese culture. They will also learn how to write compositions about the covered topics. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 214 prior to Fall 2019.

**Requisites:** ASIALANG 211**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ASIALANG 221 – THIRD SEMESTER ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 121 (or LCA LANG 301 prior to Fall 2019)**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ASIALANG 222 – FOURTH SEMESTER ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 402 prior to Fall 2019.

**Requisites:** ASIALANG 122 (LCA LANG 302 prior to Fall 2019)**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2018**ASIALANG 223 – THIRD SEMESTER FILIPINO**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 405 prior to Fall 2019.

**Requisites:** ASIALANG 124 (or LCA LANG 306 prior to Fall 2019) or placement into ASIALANG 223**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASIALANG 224 – FOURTH SEMESTER FILIPINO**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 406 prior to Fall 2019.

**Requisites:** ASIALANG 223 (or LCA LANG 405 prior to Fall 2019) or placement into ASIALANG 224**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASIALANG 225 – THIRD SEMESTER HMONG**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 407 prior to Fall 2019.

**Requisites:** ASIALANG 126 (or LCA LANG 308 prior to Fall 2019) or placement into ASIALANG 225**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**ASIALANG 226 – FOURTH SEMESTER HMONG**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 408 prior to Fall 2019.

**Requisites:** ASIALANG 225 (or LCA LANG 307 prior to Fall 2019) or placement into ASIALANG 226

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 227 – THIRD SEMESTER INDONESIAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 409 prior to Fall 2019.

**Requisites:** ASIALANG 128 (or LCA LANG 310 prior to Fall 2019) or placement into ASIALANG 227

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 228 – FOURTH SEMESTER INDONESIAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 410 prior to Fall 2019.

**Requisites:** ASIALANG 227 (LCA LANG 409 prior to Fall 2019) or placement into ASIALANG 228

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 229 – THIRD SEMESTER THAI**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 417 prior to Fall 2019.

**Requisites:** ASIALANG 130 (or LCA LANG 318 prior to Fall 2019) or placement into ASIALANG 229

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 230 – FOURTH SEMESTER THAI**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 418 prior to Fall 2019.

**Requisites:** ASIALANG 229 (or LCA LANG 417 prior to Fall 2019) or ASIALANG 357 or placement into ASIALANG 230

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 231 – THIRD SEMESTER VIETNAMESE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 419 prior to Fall 2019.

**Requisites:** ASIALANG 132 (or LCA LANG 320 prior to Fall 2019) or placement into ASIALANG 231

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 232 – FOURTH SEMESTER VIETNAMESE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 420 prior to Fall 2019.

**Requisites:** ASIALANG 231 (or LCA LANG 419 prior to Fall 2019) or placement into ASIALANG 232

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 233 – THIRD SEMESTER HINDI**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 453 prior to Fall 2019.

**Requisites:** ASIALANG 134 (or LCA LANG 354 prior to Fall 2019) or placement into ASIALANG 233

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 234 – FOURTH SEMESTER HINDI**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 454 prior to Fall 2019.

**Requisites:** ASIALANG 233 (or LCA LANG 453 prior to Fall 2019) or placement into ASIALANG 234

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 235 – THIRD SEMESTER MODERN TIBETAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 469 prior to Fall 2019.

**Requisites:** ASIALANG 136 (or LCA LANG 370 prior to Fall 2019) or placement into ASIALANG 235

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 236 – FOURTH SEMESTER MODERN TIBETAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 470 prior to Fall 2019.

**Requisites:** ASIALANG 235 (or LCA LANG 469 prior to Fall 2019) or placement into ASIALANG 236

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 237 – THIRD SEMESTER PERSIAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 463 prior to Fall 2019.

**Requisites:** ASIALANG 138 (or LCA LANG 364 prior to Fall 2019) or placement into ASIALANG 237

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 238 – FOURTH SEMESTER PERSIAN**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 464 prior to Fall 2019.

**Requisites:** ASIALANG 237 (LCA LANG 463 prior to Fall 2019) or placement into ASIALANG 238

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 239 – THIRD SEMESTER URDU**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 471 prior to Fall 2019.

**Requisites:** ASIALANG 140 (or LCA LANG 372 prior to Fall 2019) or placement into ASIALANG 239

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 240 – FOURTH SEMESTER URDU**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches.

**Requisites:** ASIALANG 239 (or LCA LANG 372 prior to Fall 2019) or placement into ASIALANG 240. Not open to students with credit for LCA LANG 472 prior to Fall 2019.

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 241 – THIRD SEMESTER SANSKRIT**

3-4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 475 prior to Fall 2019.

**Requisites:** ASIALANG 142 (or LCA LANG 376 prior to Fall 2019)

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASIALANG 242 – FOURTH SEMESTER SANSKRIT**

3-4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 476 prior to Fall 2019.

**Requisites:** ASIALANG 142 (or LCA LANG 376 prior to Fall 2019)

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ASIALANG 243 – THIRD SEMESTER BURMESE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 403 prior to Fall 2019.

**Requisites:** ASIALANG 144 (or LCA LANG 304 prior to Fall 2019)

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 244 – FOURTH SEMESTER BURMESE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 404 prior to Fall 2019.

**Requisites:** ASIALANG 243 (or LCA LANG 403 prior to Fall 2019) or ASIALANG 357

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 245 – THIRD SEMESTER KHMER**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 413 prior to Fall 2019.

**Requisites:** ASIALANG 146 (or LCA LANG 314 prior to Fall 2019)

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 246 – FOURTH SEMESTER KHMER**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 414 prior to Fall 2019.

**Requisites:** ASIALANG 245 (or LCA LANG 413 prior to Fall 2019)

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 301 – FIFTH SEMESTER CHINESE**

4 credits.

Selections principally from materials in modern Chinese society, to expose students to reading a variety of topics and styles. Classes conducted in Chinese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 301 prior to Fall 2019.

**Requisites:** ASIALANG 202, 212, or 358 (or E ASIAN 202, 214 or 318 prior to Fall 2019) or placement into ASIALANG 301

**Course Designation:** Breadth - Humanities  
Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 302 – SIXTH SEMESTER CHINESE**

4 credits.

Selections principally from materials in modern Chinese society, to expose students to reading a variety of topics and styles. Classes conducted in Chinese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 302 prior to Fall 2019.

**Requisites:** ASIALANG 301 (or E ASIAN 301 prior to Fall 2019) or placement into ASIALANG 302

**Course Designation:** Breadth - Humanities  
Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ASIALANG 303 – FIFTH SEMESTER JAPANESE**

4 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) and Japanese culture. Continuation of skill development from the second-year language courses reviewing, reinforcing and expanding grammar, kanji and vocabulary/ expressions. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 303 prior to Summer 2019.

**Requisites:** ASIALANG 204 or 358 (or E ASIAN 204 or 328 prior to Summer 2019) or placement into ASIALANG 303

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 304 – SIXTH SEMESTER JAPANESE**

4 credits.

Further practice in reading and writing. Extensive as well as intensive readings in contemporary texts. At least 1,000 more characters introduced. Conducted in Japanese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 304 prior to Summer 2019.

**Requisites:** ASIALANG 303 (or E ASIAN 303 prior to Summer 2019) or placement into ASIALANG 304

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ASIALANG 305 – FIFTH SEMESTER KOREAN**

3 credits.

Further practice in reading and writing. Extensive as well as intensive readings in contemporary texts. Conducted in Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 348 prior to Summer 2019

**Requisites:** ASIALANG 206 or 358 (E ASIAN 346 prior to Summer 2019) or placement into ASIALANG 305

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 306 – SIXTH SEMESTER KOREAN**

3 credits.

Further practice in reading and writing. Extensive as well as intensive readings in contemporary texts. Conducted in Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 348 prior to Summer 2019

**Requisites:** ASIALANG 305 (E ASIAN 347 prior to Summer 2019) or placement into ASIALANG 306

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 307 – FIRST SEMESTER SOUTHEAST ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 308 – SECOND SEMESTER SOUTHEAST ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 311 – FIRST SEMESTER CLASSICAL CHINESE**

3 credits.

Provides an introduction to basic grammar and vocabulary of literary Chinese prose and poetry. In addition, fundamental background knowledge and reference tools that can aid in the understanding of classical Chinese texts will be introduced. English is the primary language of translation and class discussion, with supplementary use of modern Mandarin. This course is intended for learners of modern Chinese as a foreign language and students of other Asian languages who need Classical Chinese for their studies. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** ASIALANG 202 (or E ASIAN 202 prior to Fall 2019) or ASIALANG 358 (E ASIA 318 prior to Fall 2019) or placement into ASIALANG 301. Not open to students who completed ASIALANG 315 or E ASIAN 321 prior to Fall 2019.

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 312 – SECOND SEMESTER CLASSICAL CHINESE**

3 credits.

An introduction to basic grammar and vocabulary of literary Chinese prose and poetry. In addition, fundamental background knowledge and reference tools that can aid in the understanding of classical Chinese texts will be introduced. English is the primary language of translation and class discussion, with supplementary use of modern Mandarin. Intended for learners of modern Chinese as a foreign language and students of other Asian languages who need Classical Chinese for their studies. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 322 prior to Fall 2019.

**Requisites:** ASIALANG 311 (E ASIAN 321 prior to Fall 2019)

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 313 – CLASSICAL JAPANESE**

3 credits.

Introduction to the grammar of classical Japanese and to reading calligraphy on art. Visits to Chazen collection a part of course. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 323 prior to Fall 2019.

**Requisites:** ASIALANG 204 or 358 (or E ASIAN 204 or 320 prior to Fall 2019) or placement into ASIALANG 303

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 315 – FIRST SEMESTER CLASSICAL CHINESE FOR CHINESE SPEAKERS**

3 credits.

Provides an introduction to basic grammar and vocabulary of literary Chinese prose and poetry as well as the discipline of translation from and into Classical Chinese for students who are native or near-native speakers of modern Chinese. In addition, fundamental background knowledge and reference tools that can aid in the understanding of classical Chinese texts will be introduced. Students improve their own skills in Classical Chinese at the same time as developing materials to aid in the Classical Chinese study of students who are learning the classical and modern language simultaneously. Not open to students with credit for E ASIAN 321 prior to Fall 2019.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 316 – SECOND SEMESTER CLASSICAL CHINESE FOR CHINESE SPEAKERS**

3 credits.

Building on basic grammar and vocabulary learned in the first semester, this course improves comprehension of literary Chinese prose and poetry as well as the discipline of translation from and into Classical Chinese for students who are native or near-native speakers of modern Chinese. In addition, fundamental background knowledge and reference tools that can aid in the understanding of classical Chinese texts will be introduced. Students improve their own skills in Classical Chinese at the same time as developing materials to aid in the Classical Chinese study of students who are learning the classical and modern language simultaneously.

**Requisites:** ASIALANG 315 (or E ASIAN 341 Prior to Fall 2019). Not open to students with credit for ASIAN 312

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ASIALANG 317 – FIRST SEMESTER SOUTH ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 323 – FIFTH SEMESTER FILIPINO**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 505 prior to Fall 2019.

**Requisites:** ASIALANG 224 or 358 (or LCA LANG 406 prior to fall 2019) or placement into ASIALANG 323

**Course Designation:** Breadth - Humanities

Frqn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 324 – SIXTH SEMESTER FILIPINO**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 506 prior to Fall 2019.

**Requisites:** ASIALANG 323 (or LCA LANG 505 prior to Fall 2019) or placement into ASIALANG 324

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ASIALANG 325 – FIFTH SEMESTER HMONG**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 507 prior to Fall 2019.

**Requisites:** ASIALANG 226 or 358 (or LCA LANG 408 prior to Fall 2019) or placement into ASIALANG 325

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 326 – SIXTH SEMESTER HMONG**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 508 prior to Fall 2019.

**Requisites:** ASIALANG 325 (or LCA LANG 507 prior to Fall 2019) or placement into ASIALANG 326

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 327 – SECOND SEMESTER SOUTH ASIAN LANGUAGE**

4 credits.

Proficiency at the elementary level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Frqn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 328 – SIXTH SEMESTER INDONESIAN**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 509 prior to Fall 2019.

**Requisites:** ASIALANG 348 (or LCA LANG 509 prior to Fall 2019) or placement into ASIALANG 328

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 329 – FIFTH SEMESTER THAI**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 517 prior to Fall 2019.

**Requisites:** ASIALANG 230 or 358 (or LCA LANG 418 prior to Fall 2019) or placement into ASIALANG 329

**Course Designation:** Breadth - Humanities

Frqn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 330 – SIXTH SEMESTER THAI**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 518 prior to Fall 2019.

**Requisites:** ASIALANG 329 (or LCA LANG 517 prior to Fall 2019) or placement into ASIALANG 330

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 331 – FIFTH SEMESTER VIETNAMESE**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students who completed LCA LANG 519 prior to Fall 2019.

**Requisites:** ASIALANG 232 or 358 (or LCA LANG 420 prior to Fall 2019) or placement into ASIALANG 331

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 332 – SIXTH SEMESTER VIETNAMESE**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 520 prior to Fall 2019.

**Requisites:** ASIALANG 331 (or LCA LANG 519 prior to Fall 2019) or placement into ASIALANG 332

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 333 – FIFTH SEMESTER HINDI**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 553 prior to Fall 2019.

**Requisites:** ASIALANG 234 or 358 (or LCA LANG 454 prior to Fall 2019) or placement into ASIALANG 333

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ASIALANG 334 – SIXTH SEMESTER HINDI**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 554 prior to Fall 2019.

**Requisites:** ASIALANG 333 (or LCA LANG 553 prior to Fall 2019) or placement into ASIALANG 334

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 335 – FIFTH SEMESTER TIBETAN**

4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 557 prior to Fall 2019.

**Requisites:** ASIALANG 236 or 358 (or LCA LANG 470 prior to Fall 2019) or placement into ASIALANG 335

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 336 – SIXTH SEMESTER TIBETAN**

4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 558 prior to Fall 2019.

**Requisites:** ASIALANG 335 (or LCA LANG 557 prior to Fall 2019) or placement into ASIALANG 336

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 337 – FIFTH SEMESTER PERSIAN**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 563 prior to Fall 2019.

**Requisites:** ASIALANG 238 or 358 (or LCA LANG 464 prior to Fall 2019) or placement into ASIALANG 337

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 338 – SIXTH SEMESTER PERSIAN**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 564 prior to Fall 2019.

**Requisites:** ASIALANG 337 (or LCA LANG 563 prior to Fall 2019) or placement into ASIALANG 338

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 339 – FIFTH SEMESTER URDU**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 571 prior to Fall 2019.

**Requisites:** ASIALANG 240 or 358 (or LCA LANG 472 prior to Fall 2019) or placement into ASIALANG 339

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 340 – SIXTH SEMESTER URDU**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 572 prior to Fall 2019.

**Requisites:** ASIALANG 339 (or LCA LANG 571 prior to Fall 2019) or placement into ASIALANG 340

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 343 – FIFTH SEMESTER BURMESE**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 503 prior to Fall 2019.

**Requisites:** ASIALANG 244 (or LCA LANG 404 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 344 – SIXTH SEMESTER BURMESE**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 504 prior to Fall 2019.

**Requisites:** ASIALANG 343 (or LCA LANG 503 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**ASIALANG 345 – FIFTH SEMESTER KHMER**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 513 prior to Fall 2019.

**Requisites:** ASIALANG 246 (or LCA LANG 414 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ASIALANG 346 – SIXTH SEMESTER KHMER**

3 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 514 prior to Fall 2019.

**Requisites:** ASIALANG 345 (or LCA LANG 513 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ASIALANG 348 – FIFTH SEMESTER INDONESIAN**

3-4 credits.

Proficiency at the advanced level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 509 prior to Fall 2019.

**Requisites:** ASIALANG 228 or 358 (or LCA LANG 410 prior to Fall 2019) or placement into ASIALANG 348

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 355 – FIRST SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS**

4 credits.

Graduate students enrolled in this course attend, and complete all assigned coursework, for one of the first-semester Asian languages offered by the department (Burmese, Chinese, Filipino, Hindi, Hmong, Indonesian, Japanese, Khmer, Korean, Persian, Sanskrit, Thai, Tibetan, Urdu, Vietnamese). In addition, graduate students develop vocabulary lists and other target language materials linked to individual research goals, and reflect both in oral discussion and in writing on progress towards research and professional language learning goals. Graduate students will have additional regular meetings with the instructor or supervisor. May be repeated if enrolled in a different language.

**Requisites:** Graduate/professional standing

**Course Designation:** L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ASIALANG 356 – SECOND SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS**

4 credits.

Graduate students enrolled in this course attend, and complete all assigned coursework, for one of the second-semester Asian languages offered by the department (Burmese, Chinese, Filipino, Hindi, Hmong, Indonesian, Japanese, Khmer, Korean, Persian, Sanskrit, Thai, Tibetan, Urdu, Vietnamese). In addition, graduate students develop vocabulary lists and other target language materials linked to individual research goals, and reflect both in oral discussion and in writing on progress towards research and professional language learning goals, and will have additional regular meetings with the instructor or supervisor. May be repeated if enrolled in a different language.

**Requisites:** ASIALANG 355

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASIALANG 357 – THIRD SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS**

4 credits.

Graduate students enrolled in this course attend, and complete all assigned coursework, for one of the third-semester Asian languages offered by the department (Burmese, Chinese, Filipino, Hindi, Hmong, Indonesian, Japanese, Khmer, Korean, Persian, Sanskrit, Thai, Tibetan, Urdu, Vietnamese). In addition, graduate students develop field work interview scripts, simple research proposals, or other intermediate target language materials linked to individual research goals, and reflect both in oral discussion and in writing on progress towards research and professional language learning goals. Graduate students will have additional regular meetings with the instructor or supervisor. Students with prior experience in the language are required to take a placement test administered by the department. May be repeated if enrolled in a different language.

**Requisites:** ASIALANG 356

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ASIALANG 358 – FOURTH SEMESTER ASIAN LANGUAGE FOR GRADUATE STUDENTS**

4 credits.

Graduate students enrolled in this course attend, and complete all assigned coursework, for one of the fourth-semester Asian languages offered by the department (Burmese, Chinese, Filipino, Hindi, Hmong, Indonesian, Japanese, Khmer, Korean, Persian, Sanskrit, Thai, Tibetan, Urdu, Vietnamese). In addition, graduate students develop field work interview scripts, simple research proposals, or other intermediate target language materials linked to individual research goals, and reflect both in oral discussion and in writing on progress towards research and professional language learning goals. Graduate students will have additional regular meetings with the instructor or supervisor. Students with prior experience in the language are required to take a placement test administered by the department. May be repeated if enrolled in a different language.

**Requisites:** ASIALANG 357

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



### ASIALANG 360 – INTERMEDIATE READING PROFICIENCY IN ASIAN LANGUAGES

4 credits.

Reinforces the skills of reading various genres of Asian target-language writings. Designed for students who have taken at least a first year Asian language course.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### ASIALANG 375 – ADVANCED JAPANESE: SOLIDIFYING THE FOUNDATIONS

3 credits.

Focus on proficiency in four skills (speaking, listening, reading, and writing) and Japanese culture. Continuation of skill development in reviewing, reinforcing, and expanding grammar, kanji and vocabulary/ expressions. Introduce skills to understand authentic textual and audiovisual materials. Solidify the foundations in preparation for advanced-level Japanese coursework.

**Requisites:** ASIALANG 303 or placement into ASIALANG 304

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASIALANG 376 – JAPANESE CONVERSATION

3 credits.

Enhances students' oral communication skills in various everyday contexts. Examines how different terms, phrases, speech styles, and strategies are used to carry on conversations in various real-life situations and practice adopting them. Out-of-classroom practices with conversation partners required. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 335 prior to Fall 2019.

**Requisites:** ASIALANG 204 (or E ASIAN 204 prior to Summer 2019) or placement into ASIALANG 303

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ASIALANG 377 – BUSINESS JAPANESE COMMUNICATION

3 credits.

Enhances students' oral and written communication skills that are specific to business contexts. Review essential grammar and honorific expressions for proper styles of communication. Develop the understanding of cultural and geographical factors that influence business practices in Japan. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 377 prior to Fall 2019.

**Requisites:** ASIALANG 204 or 358 (or E ASIAN 204 prior to Fall 2019) or placement into ASIALANG 303

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASIALANG 378 – CHINESE CONVERSATION

3 credits.

Oral communication skills including verbal and nonverbal behavior in Mandarin Chinese. Useful terms and phrases for daily conversations and professional reports. Practice conversation and interacting appropriately in varying real-life situations. Not open to students with credit for E ASIAN 333 prior to Fall 2019.

**Requisites:** ASIALANG 202 (or E ASIAN 202 prior to Fall 2019) or placement into ASIALANG 301

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ASIALANG 379 – BUSINESS CHINESE

3 credits.

Introduces learners of Chinese to the culture, commerce, and etiquette in the Chinese society. Students will acquire a working knowledge of the vocabulary and expressions that are essential for business transactions. They will also learn culturally applicable business strategies and understand Chinese people's expectations, concerns and needs. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 379 prior to Fall 2019.

**Requisites:** ASIALANG 202 or 358 (or E ASIAN 202 or 314 prior to Fall 2019) or placement into ASIALANG 301

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASIALANG 381 – BUSINESS KOREAN

3 credits.

Build advanced-level speaking, vocabulary, and communication skills needed for a variety of Korean business settings. Become familiar with Korean business culture through classroom activities and homework assignments. Topics include formal communication skills, business-related vocabulary frequently used in formal writing, and current issues related to Korea's economy, society and culture. Understand Korean companies' hiring processes and detailed information regarding Korean-specific business culture and issues. Enhance language skills for business settings in South Korea.

**Requisites:** ASIALANG 305 (E ASIAN 347 prior to Summer 2019) or placement into ASIALANG 306

**Course Designation:** Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 401 – SEVENTH SEMESTER CHINESE**

3 credits.

Extensive readings in advanced general and specialized texts in contemporary Chinese, and discussion on the content of the reading materials. Conducted in Chinese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 401 prior to Fall 2019.

**Requisites:** ASIALANG 302 (or E ASIAN 302 prior to Fall 2019)

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ASIALANG 402 – EIGHTH SEMESTER CHINESE**

3 credits.

Extensive readings in advanced general and specialized texts in contemporary Chinese, and discussion on the content of the reading materials. Conducted in Chinese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 402 prior to Fall 2019.

**Requisites:** ASIALANG 401 (or E ASIAN 401 prior to Fall 2018)

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ASIALANG 403 – SEVENTH SEMESTER JAPANESE**

3 credits.

Extensive readings in advanced general and specialized texts in contemporary Japanese, and discussion on the content of the reading materials. Conducted in Japanese. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 403 prior to Summer 2019.

**Requisites:** ASIALANG 304 (or E ASIAN 304 prior to Summer 2019)

**Course Designation:** Breadth – Humanities

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ASIALANG 405 – SEVENTH SEMESTER KOREAN**

3 credits.

Extensive readings in advanced general and specialized texts in Korean, and discussion on the content of the reading materials. Conducted in Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 405 prior to Summer 2019.

**Requisites:** ASIALANG 306 (or E ASIAN 348 prior to Summer 2019) or placement into ASIALANG 405

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 406 – EIGHTH SEMESTER KOREAN**

3 credits.

Extensive readings in advanced general and specialized texts in Korean, and discussion on the content of the reading materials. Conducted in Korean. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for E ASIAN 406 prior to Summer 2019.

**Requisites:** ASIALANG 405 (or E ASIAN 405 prior to Summer 2019) or placement into ASIALANG 406

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 407 – THIRD SEMESTER SOUTHEAST ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 408 – FOURTH SEMESTER SOUTHEAST ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 417 – THIRD SEMESTER SOUTH ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 421 – SEVENTH SEMESTER ASIAN LANGUAGE**

3-4 credits.

Proficiency at the advanced high level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ASIALANG 422 – EIGHTH SEMESTER ASIAN LANGUAGE**

3-4 credits.

Proficiency at the advanced high level in listening, speaking, reading and writing, using communicative approaches. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 602 prior to Fall 2019.

**Requisites:** ASIALANG 421 (or LCA LANG 601 prior to Fall 2019) or placement into ASIALANG 422

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 427 – FOURTH SEMESTER SOUTH ASIAN LANGUAGE**

4 credits.

Proficiency at the intermediate level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 451 – ADVANCED READINGS IN JAPANESE**

3 credits.

Introduces a variety of authentic texts in Japanese, such as essays, newspaper articles, and short stories. Utilize reading strategies introduced in class, discuss related topics, and write short essays. Develop the advanced level of linguistic proficiency as well as some understanding of the Japanese society and culture.

**Requisites:** ASIALANG 303 or placement into ASIALANG 304

**Course Designation:** Breadth – Humanities

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ASIALANG 452 – ADVANCED JAPANESE THROUGH AUDIO-VISUAL MEDIA**

3 credits.

Enhance Japanese language proficiency through the study of various genres of audio-visual media, including drama, news, documentary, talk/variety show, and commercials. Primarily focuses on the development of listening comprehension and media literacy, but also provides opportunities to improve ability to express viewpoints through writing and speaking in Japanese.

**Requisites:** ASIALANG 303 (or E ASIAN 303 prior to Summer 2019) or placement into ASIALANG 304

**Course Designation:** Breadth – Humanities

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 454 – ADVANCED CHINESE THROUGH MEDIA**

3 credits.

Designed for advanced learners of Chinese to improve their Chinese language skills and cultural knowledge. Students will watch and analyze audio-visual media, such as documentary, talk show, movies, etc.

In addition, students will make audios/videos to tell stories about themselves, their friends, or others.

**Requisites:** ASIALANG 301 (or E ASIAN 301 prior to Fall 2019) or placement into ASIALANG 302

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 457 – ADVANCED CHINESE: READING AND WRITING**  
3 credits.

Learn to interpret modified and authentic Chinese reading materials, including textbook articles, news reports, and online posts from various social media. Learn the basics of Chinese writing, and practice planning, writing, and revising Chinese essays. Solidify Chinese reading and writing skills, cultivate wider and deeper perspectives towards Chinese society and culture, and develop insight into one's own language and culture.

**Requisites:** ASIALANG 301, 379, placement into ASIALANG 302, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASIALANG 460 – INTERMEDIATE HIGH READING PROFICIENCY IN ASIAN LANGUAGES**  
4 credits.

Reinforces the skills of reading various genres of Asian target-language writings. Designed for students who have taken at least three semesters of an Asian language course.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ASIALANG 475 – ADVANCED TOPICS IN ASIAN TRANSLATION**  
3 credits.

Topics course in advanced translation from Asian languages to English. Discussion of naming conventions, genre, advanced grammar, audience, transcription, etc.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ASIALANG 507 – FIFTH SEMESTER SOUTHEAST ASIAN LANGUAGE**  
4 credits.

Proficiency at the advanced-low level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 508 – SIXTH SEMESTER SOUTHEAST ASIAN LANGUAGE**  
4 credits.

Proficiency at the advanced-low level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 517 – FIFTH SEMESTER SOUTH ASIAN LANGUAGE**  
4 credits.

Proficiency at the advanced level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 527 – SIXTH SEMESTER SOUTH ASIAN LANGUAGE**  
4 credits.

Proficiency at the advanced level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in South Asia Summer Language Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ASIALANG 560 – ADVANCED READING PROFICIENCY IN ASIAN LANGUAGES**  
4 credits.

Reinforces the skills of reading various genres of Asian Languages writings. Designed for students who have taken at least a second year Asian languages course

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASIALANG 607 – SEVENTH SEMESTER SOUTHEAST ASIAN LANGUAGE**  
4 credits.

Proficiency at the advanced-high level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

### ASIALANG 608 – EIGHTH SEMESTER SOUTHEAST ASIAN LANGUAGE

4 credits.

Proficiency at the advanced-high level in listening, speaking, reading, and writing, using communicative approaches.

**Requisites:** Declared in Southeast Asian Studies Summer Institute

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

### ASIALANG 653 – ADVANCED READINGS IN HINDI LANGUAGE

3 credits.

Designed for advanced learners of Hindi and will enhance students' knowledge of the language through reading a variety of genres from different time periods. Introducing more advanced and specialized vocabulary and sentence patterns, it primarily focuses on reading and analyzing texts but also provides opportunities to express viewpoints and increase written and spoken proficiency skills in Hindi. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 653 prior to Fall 2019.

**Requisites:** ASIALANG 334 (or LCA LANG 554 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

### ASIALANG 675 – ADVANCED READINGS IN SANSKRIT

3 credits.

Designed for advanced learners of Sanskrit and will enhance students' knowledge of the language through reading in a variety of genres from different time periods. Primarily focuses on reading and analyzing texts. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 675 prior to Fall 2019.

**Requisites:** ASIALANG 242 or 358 (or LCA LANG 476 prior to Fall 2019)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### ASIALANG 677 – ADVANCED READINGS IN TIBETAN

3 credits.

Designed for advanced level students to reinforce their Tibetan reading skills in ancient and modern poems, enhance their techniques in analyzing ancient and modern Tibetan compositions, translating ancient Tibetan literature, journalism in Modern Tibetan language. We will use Tibetan books of various genres and compositions style such as, verses, prose style to master on various genres and different forms of composition in Tibetan language. Students with prior experience in the language are required to take a placement test administered by the department. Not open to students with credit for LCA LANG 677 prior to Fall 2019.

**Requisites:** ASIALANG 236 or 358 (or LCA LANG 470 prior to Fall 2019) or placement into ASIALANG 335

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

## ASTRONOMY (ASTRON)

### ASTRON 103 – THE EVOLVING UNIVERSE: STARS, GALAXIES, AND COSMOLOGY

3 credits.

The cosmos is vast, mysterious, and beautiful. Join us on an exploration of the universe, from the big bang to the birth, life, and death of stars and the warped reality of black holes. Includes lifecycles of stars; supernovae and creation of elements; white dwarfs, pulsars and black holes; the Milky Way and galaxies; distances of stars and galaxies; quasars; expansion of universe; modern big bang cosmology, dark matter, dark energy.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ASTRON 200

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ASTRON 104 – OUR EXPLORATION OF THE SOLAR SYSTEM

3 credits.

Humanity is linked to the solar system in countless ways. Our view of the solar system, how planets form, and how planetary systems evolve has fundamentally changed with the discovery of countless exoplanets around other stars. Join us in exploring the modern view of the solar system and its relation to other planetary worlds. Includes the sky and celestial motions; ancient astronomy; the Copernican revolution; gravity, orbits, and interplanetary travel; formation of solar system; survey of sun, planets and moons; asteroids, meteors and comets; origin of life.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ASTRON 200

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ASTRON 140 – EARTH 2.0: THE EXOPLANET REVOLUTION**

3 credits.

Our Galaxy contains about 100 billion stars. Most of these stars have planets as diverse and as fascinating as the worlds in our own neighborhood, the solar system. Learn about the study of planets and exoplanets, probing some of the deepest questions science and philosophy grapple with. Explore the ways in which scientists search for and analyze planets orbiting distant stars, both in the classroom and in hands-on laboratory experiences. From moons to super-Jupiters, this course provides an engrossing introduction into the brand new science of exoplanet research.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASTRON 150 – TOPICS IN ASTRONOMY**

2 credits.

Intensively study selected topics of modern astronomy. Examples include missions to the planets, formation of stars and planets, end states of stellar evolution (supernovae, white dwarfs, pulsars, black holes), origin and evolution of the universe.

**Requisites:** ASTRON 103 or ASTRON 104

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**ASTRON/GEOSCI 160 – LIFE IN THE UNIVERSE**

2 credits.

An examination of the origin and evolution of life in the universe based on our knowledge of astronomy, biology, and geology. Includes discussions on the search for extraterrestrial life and the history of life in our solar system.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASTRON 170 – THE DARK SIDE OF THE UNIVERSE: THE GREAT COSMIC MYSTERIES FROM BLACK HOLES TO DARK ENERGY**

3 credits.

Some of the greatest mysteries of the cosmos reside in what astrophysicists call "the dark sector". This course explores the nature of black holes, dark matter, and dark energy, which show us nature at its most extreme, taking you from the warping of spacetime and the launching of plasma beams around black holes to the acceleration of the cosmos that indicates the presence of some yet unknown form of energy. Learn about the fundamental laws of nature that govern everything from GPS satellites that enable navigation apps on your cell phone to the birth and ultimate fate of the universe.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ASTRON 199 – DIRECTED STUDY**

1-3 credits.

Introductory mentored independent study as arranged with faculty.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASTRON 200 – THE PHYSICAL UNIVERSE**

3 credits.

Modern astrophysics involves applying physical principles to understand astronomical phenomena. Includes the solar system, stars, nebulae, galaxies, and cosmology, with emphasis on origins and evolution. Some nighttime observation with telescopes required.

**Requisites:** PHYSICS 201, 207, 247 or MATH 222

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASTRON/HIST SCI 206 – HISTORY OF ASTRONOMY AND COSMOLOGY**

3 credits.

The development of astronomical knowledge and cosmological views from the earliest times to the present, viewed in their social, philosophical, and technological contexts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022



**ASTRON 236 – THE HISTORY OF MATTER IN THE UNIVERSE**

3 credits.

Multidisciplinary study of how the distribution of elements in the Universe has changed over the last 10–15 billion years by tracing the history of matter from the Big Bang to the present composition of the Earth. Emphasizes connections between astronomy, geology, and chemistry. Readings will draw both on scientific journals and the popular press to allow us to engage the material on multiple levels.

**Requisites:** None**Course Designation:** Gen Ed – Communication Part B  
Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ASTRON 310 – STELLAR ASTROPHYSICS**

3 credits.

Properties of normal and peculiar stars as found from an analysis of the radiation they emit; introduction to radiation transfer. Theory of stellar atmospheres, interiors, and evolution.

**Requisites:** MATH 222 and (PHYSICS 205, 241, or 249, or concurrent enrollment)**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ASTRON 320 – THE INTERSTELLAR MEDIUM**

3 credits.

Properties of neutral and ionized interstellar gas, giant molecular clouds, the warm and hot intercloud medium, supernova remnants, and interstellar dust. Physical processes in low density gases including radiation transfer, excitation and ionization of interstellar atoms and molecules, and the interaction between gas and dust.

**Requisites:** MATH 222 and (PHYSICS 205, 241, or 249, or concurrent enrollment)**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ASTRON 330 – GALAXIES**

3 credits.

Distribution of stars, gas, and dust within our Milky Way, and their motions. Nearby galaxies: our Local Group. Optical, radio, and other techniques for observing galaxies. Composition and motions of other galaxies; galaxies with active nuclei; galaxy formation.

**Requisites:** ASTRON 310**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASTRON 335 – COSMOLOGY**

3 credits.

Introduction to the study of our Universe as a whole. Distribution of matter on the largest scales. Equations for cosmic expansion; making observations in an expanding curved spacetime. Nucleosynthesis and other tests of the Big Bang hypothesis. Gravitational collapse and the growth of structure.

**Requisites:** MATH 222 and (PHYSICS 205, 241, or 249, or concurrent enrollment)**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASTRON 340 – SOLAR SYSTEM ASTROPHYSICS**

3 credits.

Properties of solar system objects, solar atmospheric phenomena, physics of planetary atmospheres, results of recent planetary missions, comets, origin of the solar system.

**Requisites:** MATH 222 and (PHYSICS 205, 241, or 249, or concurrent enrollment)**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASTRON 460 – EXPERIENCES IN ASTRONOMICAL OBSERVING**

1 credit.

A basic introduction into astronomical research by undertaking a small observing project with optical and/or radio telescopes. Topics covered are: understanding the astronomical literature, observing and data reduction, writing scientific reports and papers, presenting scientific results, and basics of scientific ethics.

**Requisites:** Declared in Astronomy-Physics**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ASTRON 465 – OBSERVATIONAL ASTRONOMY AND DATA ANALYSIS**

3 credits.

A basic introduction into astronomical observations and data analysis techniques by undertaking observational projects with optical and radio telescopes. Topics covered include observation and data reduction, basic calibration of radio and optical telescopes, basics of data analysis and statistics, presenting scientific results, and basics of scientific ethics. Although specific to observational astrophysics, these methods are applicable to any of the physical sciences disciplines.

**Requisites:** PHYSICS 205, 241, or 249**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**ASTRON 500 – TECHNIQUES OF MODERN OBSERVATIONAL ASTROPHYSICS**

3 credits.

An introduction to astrophysics data collection. Students will be familiarized with the concepts, techniques, skills and resources needed to plan, obtain, reduce and interpret observations of astronomical objects.

**Requisites:** ASTRON 310, 320, 330, 335, 340, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASTRON/E M A 550 – ASTRODYNAMICS**

3 credits.

Coordinate system transformations, central force motion, two body problem, three and n-body problem, theory of orbital perturbations, artificial satellites, elementary transfer orbits, and elementary rocket dynamics.

**Requisites:** (E M A 202, M E 240, or PHYSICS 311, or concurrent enrollment), or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASTRON 620 – SEMINAR IN ASTROPHYSICAL TOPICS**

1-3 credits.

Current problems; topic changes.

**Requisites:** ASTRON 310, 320, 330, 335, 340, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**ASTRON 681 – SENIOR HONORS THESIS**

3 credits.

Individual study for seniors completing theses for honors in the major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASTRON 682 – SENIOR HONORS THESIS**

3 credits.

Individual study for seniors completing theses for honors in the major as arranged with a faculty member; continuation of ASTRON 681.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ASTRON 691 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASTRON 692 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member; continuation of ASTRON 691.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ASTRON 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ASTRON 700 – BASIC ASTROPHYSICS I**

2 credits.

Thermodynamics, atomic and molecular spectra, ionization and excitation, line and continuum opacities. Synchrotron radiation, Compton scattering, X-ray spectra. Radiative transfer, simple model atmospheres, radiative and convective energy transport.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ASTRON 702 – BASIC ASTROPHYSICS II**

2 credits.

Basic particle and fluid dynamics of stellar and gaseous systems in astrophysics. Review of gravitational dynamics, 2-body relaxation, phase space, basic equations of fluid dynamics, waves, shocks, winds accretion, instabilities.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASTRON 715 – STELLAR INTERIORS AND EVOLUTION**

2 credits.

Physical principles, equilibrium of gaseous spheres, energy transport, energy generation, nucleosynthesis, main sequence red giant and electron degenerate stars. Advanced topics such as origins of stellar variability, binary star evolution, star formation, supernovae explosions, evolution with mass loss.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASTRON 720 – THE INTERSTELLAR MEDIUM I: BASIC PROCESSES**

2 credits.

Observational techniques for interstellar medium studies, overview of the role of interstellar gas in galaxies, dynamics, energetics, major theories of structure and evolution, introduction to star formations and supernova remnant evolution.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ASTRON 730 – GALAXIES**

2 credits.

Stellar content and dynamics of the Milky Way and other galaxies; galaxy types, evolution of normal galaxies, active nuclei, quasars, radio galaxies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**ASTRON 735 – OBSERVATIONAL COSMOLOGY**

2 credits.

Extragalactic distance scale; groups and clusters of galaxies; distribution of galaxies and radio sources. Introduction to general relativity, cosmological models, microwave background, early universe, galaxy formation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ASTRON/PHYSICS 910 – SEMINAR IN ASTROPHYSICS**

0-1 credits.

Current topics in astrophysics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASTRON 920 – SEMINAR-ASTROPHYSICAL TOPICS**

1-3 credits.

Current problems; topic changes.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**ASTRON 990 – RESEARCH AND THESIS**

1-12 credits.

Advanced level mentored reading and research for graduate students.

**Requisites:** Declared in Astronomy PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ASTRON 999 – ADVANCED INDEPENDENT READING**

1-2 credits.

Advanced level mentored reading and research for graduate students.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022

## ATMOSPHERIC AND OCEANIC SCIENCES (ATM OCN)

**ATM OCN 100 – WEATHER AND CLIMATE**

3 credits.

Nature and variability of wind, temperature, clouds and precipitation.

Storm systems, fronts, thunderstorms, tornadoes and their prediction. Air composition and pollution. Global winds, seasonal changes, climate and climatic change.

**Requisites:** Not open to students with credit for ATM OCN 101**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ATM OCN 101 – WEATHER AND CLIMATE**

4 credits.

Nature and variability of wind, temperature, clouds and precipitation. Storm systems, fronts, thunderstorms, tornadoes and their prediction. Air composition and pollution. Global winds, seasonal changes, climate and climatic change. Includes map analyses and basic quantitative lab exercises.

**Requisites:** Not open to students with credit for ATM OCN 100

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/ENVIR ST/GEOSCI 102 – CLIMATE AND CLIMATE CHANGE**

3 credits.

Describes the basic climate principles governing the climate system. It describes the climate and climate variability at present, climate evolution in the past, and the projected climate change into the future. The scientific principles underlying the natural and anthropogenic greenhouse effect and climate model forecasts are elucidated.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ATM OCN/GEOSCI 105 – SURVEY OF OCEANOGRAPHY**

3–4 credits.

Nature and behavior of ocean water, interaction of oceans and atmosphere, structure of the ocean floor, life in the oceans, our relationship to the marine environment.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/SOIL SCI 132 – EARTH'S WATER: NATURAL SCIENCE AND HUMAN USE**

3 credits.

Water is central to the functioning of planet Earth. As humans increase their impact on Earth's systems and cohabitants, our understanding of the multiple roles of water becomes critical to finding sustainable strategies for human and ecosystem health. Explores the science of Earth's hydrosphere, with constant attention to human uses and impacts.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/GEOSCI 140 – NATURAL HAZARDS AND DISASTERS**

3 credits.

An exploration of the science behind natural disasters including earthquakes, tsunamis, volcanic eruptions, landslides, tornadoes, hurricanes, and floods. Why, where, and when do these events occur, and why are some predictable but others are not? Addresses hazard assessment, forecasting, and mitigation to lessen their impact on society.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 141 – NATURAL HAZARDS OF WEATHER**

2 credits.

Explores the basic science of weather hazards ongoing around the globe and practical issues of Prediction, Risk Reduction, Resilience and Vulnerability (PRRRV) associated with these hazards.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ATM OCN/ENVIR ST 171 – GLOBAL CHANGE: ATMOSPHERIC ISSUES AND PROBLEMS**

2–3 credits.

Atmospheric problems of global significance. Greenhouse warming, ozone layer, acid rain, climate change. Study based on elementary principles of atmospheric science. Systems approach applied to changing atmospheric composition. Interactions among geochemical cycles, anthropogenic inputs and other parts of the environment.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 310 – DYNAMICS OF THE ATMOSPHERE AND OCEAN I**

3 credits.

Introduction to theory of fluid motions for atmosphere and ocean. Elementary kinematics, fundamental forces, effects of earth's gravity and rotation, concepts and applications of hydrostatic and geostrophic balance.

**Requisites:** (PHYSICS 202, 208, or 248 or concurrent enrollment in PHYSICS 202, 208, or 248) and MATH 234 or concurrent enrollment in MATH 234

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 311 – DYNAMICS OF THE ATMOSPHERE AND OCEAN II**  
3 credits.

Intermediate theory of fluid motions for atmosphere and ocean. Emphasis on large scale applications and basic theory for geophysical wave types. Thermal wind shear, frictional flow, vorticity concepts, Rossby waves, Sverdrup ocean flow.

**Requisites:** ATM OCN 310

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/ENVIR ST/GEOG 322 – POLAR REGIONS AND THEIR IMPORTANCE IN THE GLOBAL ENVIRONMENT**

3 credits.

Reviews the past, present, and future of the Arctic and Antarctic regions. Covers the history, geography, atmospheric and ocean circulations, permafrost, ice sheets, glaciers, and future state of the Arctic and Antarctica as projected by earth system models. Also explores the role of the polar regions in the earth's system and associated global climatic feedbacks.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/GEOG 323 – SCIENCE OF CLIMATE CHANGE**

3 credits.

Calculus-based treatment of climate system physics and the mechanisms of modern-day anthropogenic climate change. Covers how solar radiation and rotating fluid dynamics determine the basic climate state; mechanisms of natural variability and change in climate; why anthropogenic climate change is occurring; and which scientific uncertainties are most important to estimates of 21st century change.

**Requisites:** (PHYSICS 103, 201, 207, or 247) and (MATH 217, 221, or 275). Not open to students with credit for ATM OCN 425.

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**ATM OCN 330 – PHYSICS OF THE ATMOSPHERE AND OCEAN I**  
3 credits.

Physical variables, laws, characteristics and direct measurements for atmosphere and ocean. Thermodynamics and moist atmospheric processes. Basic physics of clouds, precipitation, and chemical constituents.

**Requisites:** (PHYSICS 202, 208, or 248 or concurrent enrollment in PHYSICS 202, 208, or 248) and MATH 234 or concurrent enrollment in MATH 234

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN/ENVIR ST/GEOG 332 – GLOBAL WARMING: SCIENCE AND IMPACTS**

3 credits.

Offers a fundamental understanding of how and why global warming is happening and what to expect in the future. Investigate and discuss the evidence for change, the science that explains these observations, predicted impacts on humans and ecosystems, and the societal debate over proposed solutions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/ENVIR ST/GEOG/GEOSCI 335 – CLIMATIC ENVIRONMENTS OF THE PAST**

3 credits.

Climate change at timescales from the last several million years to the last 100 years, with emphasis on more recent timescales. Examines how climate variability arises from interplay between external forcings, feedbacks within the earth system, and (more recently) human activity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 340 – PHYSICS OF THE ATMOSPHERE AND OCEAN II**  
3 credits.

Radiation, energy budget, and cloud physics. Scattering, absorption, emission and diabatic heating by shortwave and longwave processes. Introduction to cloud physics including cloud nucleation processes, particle growth, precipitation development, and convective cloud processes.

**Requisites:** ATM OCN 330

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN/ENVIR ST 355 – INTRODUCTION TO AIR QUALITY**  
3 credits.

Links chemistry and meteorology to engineering, law, policy, and public health. Presents key ideas in air quality, with focus on reactive pollutants in the outdoor environment, especially gas and particle phase chemicals that react with human tissue to cause sickness and death. Discusses environmental impacts of these pollutants and regulatory approaches for their control in the U.S. and around the world. Indoor air quality will be included. Non-reactive pollutants, especially carbon dioxide, will be compared and contrasted with reactive air pollutants.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 401 – TOPICS IN METEOROLOGY**  
2-3 credits.

Special topics to be given as the need and opportunity arise.

**Requisites:** ATM OCN 310 and 330

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ATM OCN 404 – METEOROLOGICAL MEASUREMENTS**  
2 credits.

Practical experience in planning experiment implementation, performing instrument quality control, conducting computational data analysis, and writing and presenting of meteorological and climatological observations in a team setting.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 405 – AOS SENIOR CAPSTONE SEMINAR**  
1 credit.

Provides synthesis and overview. Research on topic of the student's choosing is presented at the end.

**Requisites:** ATM OCN 310, 311, 330 and 340

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 425 – GLOBAL CLIMATE PROCESSES**  
3 credits.

Overview of physical processes of the atmosphere and its coupling to the ocean and land. Understanding its seasonal climatology and variability. Synthesis through application of junior AOS core dynamics and physics to quantitatively understand diabatic, transport, and dissipative processes. Examples include global warming, air-ocean coupling, ENSO, ozone hole, tropospheric water and chemistry issues, diurnal to interannual time scales.

**Requisites:** ATM OCN 311 and 340

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ATM OCN 441 – RADAR AND SATELLITE METEOROLOGY**  
3 credits.

Provides necessary knowledge about radar and satellite meteorology.

**Requisites:** ATM OCN 340

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 452 – SYNOPTIC LABORATORY I: THE FRONTAL CYCLONE**  
4 credits.

Cyclone and frontal theory; case studies illustrating the structure and evolution of the frontal cyclone; diagnostic techniques: interpretation of satellite photographs, preparation of vertical cross sections and isentropic analysis.

**Requisites:** ATM OCN 311 and 340

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



### ATM OCN 453 – SYNOPTIC LABORATORY II: MESOSCALE METEOROLOGY

4 credits.

Local wind systems, thunderstorms, mesoscale convection systems, interactions with synoptic scale weather. Analysis, prediction, nowcasting and observation of mesoscale weather, including interpretation of satellite and radar information.

**Requisites:** ATM OCN 311 and 340

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ATM OCN/ENVIR ST 520 – BIOCLIMATOLOGY

3 credits.

How climate systems and biological organisms operate and interact at the global scale and the implications of this for climate change, ecosystem ecology and human land use.

**Requisites:** (ATM OCN 101, ATM OCN/ENVIR ST/ATM OCN 171, or ATM OCN/GEOG/ATM OCN 323), (BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ ZOOLOGY/BIOLOGY 102, BIOCORE 381, or 485), and junior standing, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ATM OCN 522 – TROPICAL METEOROLOGY

3 credits.

Characteristics of the tropical atmosphere; local and diurnal phenomena; tropical synoptic systems; circulation and energetics; mechanisms of tropical climate variations.

**Requisites:** ATM OCN 311 and 340, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ATM OCN/ENVIR ST/GEOG 528 – PAST CLIMATES AND CLIMATIC CHANGE

3 credits.

Climatic change throughout geologic time, especially in the last 10 millennia; mechanisms of change, evidence, and criteria, paleogeography and paleoclimatology, climate models.

**Requisites:** Junior standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### ATM OCN/AGRONOMY/SOIL SCI 532 – ENVIRONMENTAL BIOPHYSICS

3 credits.

Plant-environment interactions with particular reference to energy exchanges and water relations. Models are used to provide a quantitative synthesis of information from plant physiology, soil physics, and micrometeorology with some consideration of plant-pest interactions. Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.

**Requisites:** BOTANY/BIOLOGY/BOTANY 130 and (MATH 211, 217, 221 or 275) and (PHYSICS 103, 201, 207, or 247), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ATM OCN/ENVIR ST 535 – ATMOSPHERIC DISPERSION AND AIR POLLUTION

3 credits.

Physical principles of atmospheric transport processes. Variation of transport in time and place. Local and regional concentrations of pollutants. Environmental implications of air pollution and control strategies.

**Requisites:** MATH 234 or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ATM OCN 573 – COMPUTATIONAL METHODS IN ATMOSPHERIC AND OCEANIC SCIENCES**

3 credits.

An introduction to multiple programming languages and technical computing methods used in the Atmospheric and Oceanic Sciences. Data analysis methods and software development for specialized applications related to the field are also highlighted.

**Requisites:** MATH 234 and (COMP SCI 200 or placement into COMP SCI 300) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 575 – CLIMATOLOGICAL ANALYSIS**

3-4 credits.

Mathematical and statistical tools applicable to the investigation of climatological problems; nature and treatment of climatological data.

**Requisites:** ATM OCN 311 and 340, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 610 – GEOPHYSICAL FLUID DYNAMICS I**

3 credits.

Basic dynamic concepts: equations of motion, basic approximations, Coriolis force, wave motions, normal modes, gravity waves, frictional turbulence and convective processes, geostrophic adjustment, scaling argument, effects of rotation on wave motions. Vorticity and potential vorticity.

**Requisites:** (PHYSICS 202, 208, or 248) and MATH 234, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 611 – GEOPHYSICAL FLUID DYNAMICS II**

3 credits.

Quasi-geostrophic motion, potential vorticity equations, E-P fluxes, Rossby waves, boundary layer processes, wind-driven ocean circulation and western boundary currents, barotropic and baroclinic instability, tropical flows.

**Requisites:** ATM OCN 610 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 615 – LABORATORY IN ROTATING FLUID DYNAMICS**

1 credit.

Rotating fluid experiments, theory and data analysis are used to deepen understanding of geophysical fluid dynamics and observed phenomena in the atmosphere and ocean. Focuses on hands-on experiences in the rotating tank lab and with real data.

**Requisites:** ATM OCN 311 or 610, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ATM OCN 630 – INTRODUCTION TO ATMOSPHERIC AND OCEANIC PHYSICS**

3 credits.

Covers thermodynamics theory of multiphase systems, thermodynamic analysis of atmosphere, microphysical processes in the atmosphere, atmospheric and oceanic chemical processes, conduction of heat and moisture into the atmosphere from ocean and land surface.

**Requisites:** (PHYSICS 202, 208, or 248) and MATH 234, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 637 – CLOUD PHYSICS**

3-4 credits.

Processes of cloud formation, growth, and dissipation from the standpoint of both the cloud particles and the whole cloud as a dynamic entity.

**Requisites:** ATM OCN 311 and 340, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ATM OCN 638 – ATMOSPHERIC CHEMISTRY**

3 credits.

Evolution of the atmosphere, chemical structure, instrumental analysis, trace gases, aerosol mechanics, chemical processes.

**Requisites:** (PHYSICS 202, 208, or 248) and MATH 234, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ATM OCN 640 – RADIATION IN THE ATMOSPHERE AND OCEAN**

3 credits.

Introduction to radiation: basic laws, radiative transfer under clear sky conditions, scattering by individual particles, multiple scattering, radiative properties of clouds and aerosols, energy budget, miscellaneous applications.

**Requisites:** (PHYSICS 202, 208, or 248) and MATH 234, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 651 – SYNOPTIC-DYNAMIC LABORATORY**

3 credits.

Quantitative lab applications of atmospheric dynamics and thermodynamics to synoptic systems. Jet stream systems, cyclone development, global air motions, performance of numerical prediction models, local surface forecasting.

**Requisites:** (ATM OCN 610 and 630) or 650, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ATM OCN 660 – INTRODUCTION TO PHYSICAL OCEANOGRAPHY**

3 credits.

Physical properties of sea water: ocean climatology, water, salt and heat budget, measurements, ocean circulation and water mass of the world ocean, thermocline, thermohaline, equatorial ocean and southern ocean.

**Requisites:** ATM OCN 311 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 691 – SENIOR THESIS**

2-3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ATM OCN 692 – SENIOR THESIS**

2-3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ATM OCN 698 – DIRECTED STUDY**

1-5 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ATM OCN 699 – DIRECTED STUDY**

1-5 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ATM OCN/CIV ENGR 701 – THE CHEMISTRY OF AIR POLLUTION**  
2 credits.

Covers background and modern research methods for the application of chemical analysis tools to understanding of the origin, composition, and the chemical transformations of pollutants that occur in the atmosphere. Emphasis will be directed at the pollutants impacting human health, climate change, and ecosystem degradation. Approximately half of the course materials will be taken from the scientific literature and will provide the opportunity to advance skills in the critical reading of journal articles. The course is directed at graduate students conducting research and interested in air pollution and environmental chemistry. Gain experiences in presenting scientific research methods and results related to course materials.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 705 – THE MIDDLE ATMOSPHERE**  
3 credits.

Dynamics, chemistry and radiation of the stratosphere and mesosphere. Structure and composition. Observing techniques. Gravity, Rossby, and Kelvin waves. Wave-mean flow interaction. Instabilities. Tracer transport. Modeling the middle atmosphere. Ozone layer. Greenhouse effect.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**ATM OCN 712 – GENERAL CIRCULATION OF THE ATMOSPHERE**  
3 credits.

The theory of the general circulation with emphasis on the sources, sinks, and transport of mass, angular momentum, and energy that serve to maintain the circumpolar vortex.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 718 – DYNAMICS OF MOIST CONVECTIVE SYSTEMS**  
3 credits.

Governing equations for non-hydrostatic dynamics, mixed phase thermodynamics and microphysics. Cumulus parameterization and scale interactions. Application to theoretical and numerical models of thunderstorms (and attendant weather phenomena) and Mesoscale Convective Systems in the extra tropics and tropics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ATM OCN/ENVIR ST 745 – METEOROLOGICAL SATELLITE APPLICATIONS**  
2-3 credits.

Use of satellite imagery and measurements in meteorological research and operations; orbital characteristics; navigation; instrumentation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN/ENVIR ST/GEOSCI/ZOOLOGY 750 – PROBLEMS IN OCEANOGRAPHY**  
3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 751 – THE FRONTAL CYCLONE**  
3 credits.

Application of fundamental dynamics and thermodynamics to cyclone and frontal theory; case studies illustrating the structure and evolution of the frontal cyclone; diagnostic consideration of vertical motions, frontogenesis and potential inversion; computational analysis of fundamental diagnostic equations, analysis of vertical cross sections.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 753 – MESOSCALE METEOROLOGY**  
3 credits.

Synthesizes the fundamentals of atmospheric dynamics, thermodynamics and microphysics to explain the theory behind the structure, evolution and prediction of microscale, mesoscale and cloud scale weather. Learn the dynamics, and thermodynamics of mesoscale, fogs, cumulus, and severe storms (including tornadoes), mountain meteorology and convective tropical weather systems (including hurricanes and typhoons) and application of multi-scale numerical methods and models for analysis and prediction.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ATM OCN 760 – LARGE-SCALE OCEAN-ATMOSPHERE COUPLING**  
3 credits.

Various aspects of global ocean-atmosphere coupling and climate variability; global surface flux distribution; mixed layer dynamics; tropical dynamics and El Nino and Southern Oscillation; extratropical ocean-atmosphere coupling; interannual to interdecadal climate variability.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**ATM OCN 773 – BOUNDARY LAYER METEOROLOGY**  
3 credits.

Observations of and theories for boundary layers, turbulence, spectra, plumes, dust devils, convection, terrain effects, and other phenomena in the lowest 2 km of the atmosphere.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ATM OCN 801 – TOPICS IN THEORETICAL METEOROLOGY**  
2-3 credits.

Advanced level subjects in dynamics, synoptics, climate-dynamics and atmospheric physics including recent advances.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ATM OCN 810 – PRACTICAL TRAINING IN ATMOSPHERIC AND OCEANIC SCIENCES I**  
1 credit.

Practical training in atmospheric and oceanic sciences. Provides direct, hands-on exposure to careers in the discipline. Includes placement into student-designed or existing internship in atmospheric and oceanic science related companies, agencies, and organizations.

**Requisites:** Declared in Atmospheric and Oceanic Sciences MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ATM OCN 811 – PRACTICAL TRAINING IN ATMOSPHERIC AND OCEANIC SCIENCES II**  
2 credits.

Practical training in atmospheric and oceanic sciences. Provides direct hands-on exposure to careers in the discipline. Continues the internship in atmospheric and oceanic science related companies, agencies, and organizations. Develop a portfolio of items necessary for the American Meteorological Society Certified Consulting Meteorology exam.

**Requisites:** ATM OCN 810

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ATM OCN 900 – SEMINAR-METEOROLOGY**  
1-2 credits.

Discussion of the philosophy of science, communication, and history of atmospheric and oceanic science topics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN/BOTANY/CIV ENGR/ENVIR ST/GEOSCI/ZOOLOGY 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**  
1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ATM OCN/ENVIR ST 925 – SEMINAR-CLIMATOLOGY**  
1-2 credits.

Historical climatology with emphasis on the last few centuries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**ATM OCN/AGRONOMY/BOTANY/ENTOM/ENVIR ST/F&W ECOL/GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**  
1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ATM OCN 965 – SEMINAR-OCEANOGRAPHY**

1-2 credits.

Advanced topics in oceanography.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ATM OCN/BOTANY/ENVIR ST/F&W ECOL/GEOG/GEOSCI/ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**ATM OCN 990 – RESEARCH**

1-12 credits.

Research with atmospheric and oceanic science faculty advisors.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ATM OCN 999 – ADVANCED INDEPENDENT STUDY**

1-6 credits.

Advanced independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BIOCHEMISTRY (BIOCHEM)****BIOCHEM 100 – BIOCHEMISTRY FRESHMAN SEMINAR**

1 credit.

Introduction to the discipline of biochemistry, to the UW Biochemistry Department, to some of the research projects the faculty are pursuing, to the University, and to the career options open to an individual with a biochemistry background.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM 104 – MOLECULES TO LIFE AND THE NATURE OF SCIENCE**

3 credits.

Introduction to how life works at a molecular level and the evolutionary paths that led to the great diversity of life on our planet. With this foundation, discuss current topics in the news such as: exploring the human genome to understand our species' history and to diagnose and treat disease; genetic engineering of crops in relation to foods safety and effects on ecosystems; gene editing of insects and mammals including humans; how to determine whether herbal remedies, vaccines, etc. are effective and safe; and current trends in biotechnology and what might be on the horizon. Focus on appreciating the nature of science and becoming better equipped to explore and evaluate scientific topics of interest.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for Honors students under direct guidance of a Biochemistry faculty member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**BIOCHEM 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a Biochemistry faculty member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**BIOCHEM 301 – SURVEY OF BIOCHEMISTRY**

3 credits.

Explore the basic chemical properties of proteins, lipids, carbohydrates, and nucleic acids. Topics to be discussed include protein structure and function, the chemical logic of metabolism, and the mechanisms of DNA replication, DNA transcription, DNA repair, and gene expression. Understand principles and themes in biochemistry that relate to metabolic diseases, drug design, virus infection and vaccination, and gene therapy. Does not cover the foundational material necessary to succeed in additional biochemistry coursework, and is not likely to be acceptable for medical or veterinary school admission.

**Requisites:** CHEM 104, 109, or 116. Not open to students with credit for BIOCHEM 501.

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM 375 – SPECIAL TOPICS**

1-4 credits.

Examines various special topics in biochemistry. Topics and content will vary each semester and by section of the course.

**Requisites:** None

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**BIOCHEM 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Biochemistry and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Workplace – Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**BIOCHEM 400 – STUDY ABROAD IN BIOCHEMISTRY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**BIOCHEM 501 – INTRODUCTION TO BIOCHEMISTRY**

3 credits.

Chemistry, nutrition, and metabolism of biological systems.

**Requisites:** (CHEM 341, 343, or concurrent enrollment), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM 507 – GENERAL BIOCHEMISTRY I**

3 credits.

Chemistry of biological materials, intermediary metabolism and protein structure.

**Requisites:** CHEM 345

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM 508 – GENERAL BIOCHEMISTRY II**

3-4 credits.

Biosynthesis of biological molecules, signal transduction mechanisms, chemistry and metabolism of nucleic acids, protein synthesis, and molecular and cellular biology.

**Requisites:** BIOCHEM 507

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM/NUTR SCI 510 – NUTRITIONAL BIOCHEMISTRY AND METABOLISM**

3 credits.

Lectures in nutrition with a substantial background in biochemistry. Emphasis on biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals and vitamins and their roles and interrelationships in nutrition and metabolism.

**Requisites:** BIOCHEM 301, 501, 507, BMOLCHEM 503, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM 550 – PRINCIPLES OF HUMAN DISEASE AND BIOTECHNOLOGY**

2 credits.

Covers modern approaches to human diseases and biotechnology, emphasizing the molecular and biochemical basis of cancer and metabolic disorders with an overview of recent advances in applied biotechnology. Investigates the mechanisms of disease onset, progression, and therapeutic strategies through contemporary primary research literature.

**Requisites:** BIOCHEM 501 or 507**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM 551 – BIOCHEMICAL METHODS**

4 credits.

Introduction to modern biochemical laboratory techniques and current biochemical literature. Includes student seminar presentations based upon scientific literature that parallels experiments performed in the lab.

**Requisites:** BIOCHEM 501, 507, or concurrent enrollment**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM 570 – COMPUTATIONAL MODELING OF BIOLOGICAL SYSTEMS**

3 credits.

Introduction to the mathematical and computational tools needed to model biological systems spanning from molecules to ecosystems. Topics include protein folding and dynamics, gene regulation, biomolecular networks, and population dynamics. Teaches the fundamentals in quantitative thinking and analytical reasoning about complex biological systems.

**Requisites:** (MATH 217, 221, or 275) and ZOOLOGY/BIOLOGY/BOTANY/ BIOLOGY/ZOOLOGY 151, ZOOLOGY 153, BIOCORE 381, or (BIOLOGY/ ZOOLOGY/BIOLOGY 101, 102 and BIOLOGY/BOTANY/BIOLOGY 130), or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM/M M & I 575 – BIOLOGY OF VIRUSES**

2 credits.

Broad coverage of animal virology taught at molecular level. Topics include virus structure, viral replication/lifecycle, aspects of pathogenesis and prevention.

**Requisites:** (BIOCORE 381 and 382), BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 151, M M & I 301, or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOCHEM 601 – PROTEIN AND ENZYME STRUCTURE AND FUNCTION**

2 credits.

Protein structure and dynamics. Protein folding. Physical organic chemistry of enzymatic catalysis. Analysis of enzyme kinetics and receptor-ligand interactions. Enzymatic reaction mechanisms.

**Requisites:** CHEM 345 and (BIOCHEM 501 or 507) or graduate/ professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**BIOCHEM/B M I/BMOLCHEM/MATH 609 – MATHEMATICAL METHODS FOR SYSTEMS BIOLOGY**

3 credits.

Provides a rigorous foundation for mathematical modeling of biological systems. Mathematical techniques include dynamical systems and differential equations. Applications to biological pathways, including understanding of bistability within chemical reaction systems, are emphasized.

**Requisites:** MATH 415 and (MATH 320, 340, 341, or 375) or graduate/ professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**BIOCHEM/GENETICS/MICROBIO 612 – PROKARYOTIC MOLECULAR BIOLOGY**

3 credits.

Molecular basis of bacterial physiology and genetics with emphasis on molecular mechanisms; topics include nucleic acid-protein interactions, transcription, translation, replication, recombination, regulation of gene expression.

**Requisites:** (BIOCHEM 501 or 507) and (MICROBIO 470, GENETICS 466 or 468) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM/NUTR SCI 619 – ADVANCED NUTRITION: INTERMEDIARY METABOLISM OF MACRONUTRIENTS**

3 credits.

Discuss metabolic control; gastrointestinal physiology, nutrient absorption; molecular, cellular, organismal aspects of glucose transport, metabolism, regulation; fuel sensing; molecular regulation of fatty acid, lipid metabolism; cellular, organismal aspects of protein metabolism; hormonal control of metabolism; experimental approaches for studying metabolism.

**Requisites:** NUTRI SCI 510, BIOCHEM 507, 508, or BMOLCHEM 503 or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM/GENETICS/MD GENET 620 – EUKARYOTIC MOLECULAR BIOLOGY**

3 credits.

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms.

**Requisites:** BIOCHEM 501, 508 or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM/BOTANY 621 – PLANT BIOCHEMISTRY**

3 credits.

Biochemistry of photosynthesis, respiration, cell walls, and other metabolic and biosynthetic processes in plants.

**Requisites:** BIOCHEM 501, 507, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**BIOCHEM 625 – MECHANISMS OF ACTION OF VITAMINS AND MINERALS**

2 credits.

Emphasizes the importance of coenzyme and cofactors of enzymes (i.e., vitamins and minerals) in biochemistry. All aspects of the biochemistry of coenzymes will be covered, including their biosynthesis as far as is known, the biochemical reactions they catalyze, their chemical and spectroscopic properties, and the mechanisms by which they facilitate biochemical reactions.

**Requisites:** CHEM 345 and (BIOCHEM 501, 507, or concurrent enrollment), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM/PHMCOL-M/ZOOLOGY 630 – CELLULAR SIGNAL TRANSDUCTION MECHANISMS**

3 credits.

Comprehensive coverage of human hormones, growth factors and other mediators; emphasis on hormone action and biosynthesis, cell biology of hormone-producing cells.

**Requisites:** (BIOCHEM 501 or 507) and (BIOCORE 383, BIOLOGY/ZOOLOGY/BIOLOGY 101, or ZOOLOGY 570) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**BIOCHEM/GENETICS 631 – PLANT GENETICS AND DEVELOPMENT**

3 credits.

Covers the basic concepts of genetics and genomics as applied to plants and their development, including discussions on breeding systems (modes of reproduction, sex determination, self incompatibility and crossing barriers), linkage analysis, genome structure and function (structure, function and evolution of nuclear and organellar chromosomes; haploidy and polyploidy; expression regulation and epigenetics), along with a description of current methodologies used in the analysis of these processes within the context of plant development. The objective is to instigate a broader knowledge and understanding of the principles and methodologies used in plant genetics and their applications in investigations of the molecular mechanisms that modulate plant development.

**Requisites:** GENETICS 466, 468, BIOCORE 587, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM/NUTR SCI 645 – MOLECULAR CONTROL OF METABOLISM AND METABOLIC DISEASE**

3 credits.

Examination of various physiological states and how they affect metabolic pathways. Discussion of a number of special topics related to the unique roles of various tissues and to metabolic pathways in disease states, including adipocyte biology, beta-cell biology, epigenetics, inflammation, and aging related diseases.

**Requisites:** BIOCHEM 501, 508 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM/CHEM 665 – BIOPHYSICAL CHEMISTRY**

4 credits.

Equilibrium thermodynamics, chemical kinetics and transport properties, with emphasis on solution behavior and application to noncovalent interactions of biological macromolecules in solution. Focus on biological applications of physical chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCHEM 681 – SENIOR HONORS THESIS**

2-4 credits.

First semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Biochemistry, as arranged with a Biochemistry faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Biochemistry, as arranged with a Biochemistry faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 691 – SENIOR THESIS**

2 credits.

First semester of individual study for undergraduate students completing a thesis in the area of Biochemistry, as arranged with a Biochemistry faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**BIOCHEM 692 – SENIOR THESIS**

2 credits.

Second semester of individual study for undergraduate students completing a thesis in the area of Biochemistry, as arranged with a Biochemistry faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 699 – SPECIAL PROBLEMS**

1-4 credits.

Provides academic credit for research, library, and/or laboratory work under direct guidance of a faculty member. Students are responsible for arranging the work and credits with the supervising faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM/BMOLCHEM 701 – PROFESSIONAL RESPONSIBILITY**

1 credit.

Training for the practical aspects of being a scientist. Will cover ethics, peer review, grant writing, science communication, career alternatives, paper writing, experimental design, research documentation, science funding, academic-private interface, scientific fraud, and more.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM/CHEM 704 – CHEMICAL BIOLOGY**

3 credits.

Chemistry and biology of proteins, nucleic acids and carbohydrates; application of organic chemistry to problems in cell biology, biotechnology, and biomedicine.

**Requisites:** Declared in Biochemistry or Chemistry graduate program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM 719 – FROM ATOMS TO MOLECULES**

3 credits.

Topics covered include protein structure and folding, protein dynamics, biological catalysis, membrane structure and assembly, nucleic acid structure and folding, and bioenergetics. Each topic includes discussion of the primary literature, hypothesis generation, experimental design, data, analysis and interpretation underlying the facts in the textbook. Supports transition from undergraduate consumers of knowledge to graduate students and future independent scientists who will discover and add new knowledge.

**Requisites:** Declared in Biochemistry PhD program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM 721 – BIOCHEMICAL COMMUNICATION**

2 credits.

Introduction to written and visual communication of biochemical research, both to other scientists and to general audiences, including: how to recognize and adapt work to different audiences; how to construct a scientific argument and the different strategies used for research reports, reviews, and proposals; and how to create figures and posters that clearly convey scientific data and concepts. Learn about the peer review process and revision of scientific writing. An intensive writing component, which requires multiple written and visual documentation on topics related to thesis research.

**Requisites:** Declared in Biochemistry PhD program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCHEM 729 – ADVANCED TOPICS**

1-3 credits.

Specialized subjects of current interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 799 – PRACTICUM IN BIOCHEMISTRY TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in Biochemistry, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**BIOCHEM 800 – PRACTICAL NUCLEAR MAGNETIC RESONANCE THEORY**

2 credits.

Multiple pulse Nuclear Magnetic Resonance (NMR), off-resonance effects, composite and shaped pulses, product operators, coherence transfer, one- and two-dimensional NMR, phase cycling, multiple quantum coherence, and cross relaxation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**BIOCHEM 801 – BIOCHEMICAL APPLICATIONS OF NUCLEAR MAGNETIC RESONANCE**

2 credits.

Survey of current solution-state nuclear magnetic resonance techniques used in biochemical research; the emphasis will be on how data are acquired and on practical applications.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**BIOCHEM/BOTANY/GENETICS 840 – REGULATORY MECHANISMS IN PLANT DEVELOPMENT**

3 credits.

Molecular mechanisms whereby endogenous and environmental regulatory factors control development; emphasis on stimulus perception and primary events in the signal chain leading to modulated gene expression and cellular development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**BIOCHEM/CHEM 872 – SELECTED TOPICS IN MACROMOLECULAR AND BIOPHYSICAL CHEMISTRY**

1-3 credits.

Various selected topics in contemporary macromolecular or biophysical chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM/NUTR SCI 901 – SEMINAR-NUTRITION AND METABOLISM (ADVANCED)**

1 credit.

Presentation of original research results; discussion of recent articles in animal metabolism and nutrition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**BIOCHEM 906 – TOPICS IN MODELING FOR BIOCHEMICAL SYSTEMS**

1 credit.

Discuss topics relevant to predictive modeling of bioenergy systems. Present talks and lead brainstorming sessions intended to sharpen skills at cross-disciplinary communication. Modeling microbes and plants at the genetic, molecular and systems level is emphasized.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**BIOCHEM 909 – SEMINAR-ENZYMOLGY (ADVANCED)**

1 credit.

Research reports, special topics, and reports from recent literature in enzymology and enzyme mechanisms.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**BIOCHEM 910 – SEMINAR-MOLECULAR VIROLOGY (ADVANCED)**

1 credit.

Research reports, special topics, and reports from recent literature in molecular virology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 912 – SEMINAR-MOLECULAR MECHANISMS OF DEVELOPMENT**

1 credit.

Classical and current papers concerning molecular and genetic mechanisms of eukaryotic development will be presented and discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**BIOCHEM/BMOLCHEM 913 – SEMINAR-RIBOGROUP (ADVANCED)**

1 credit.

Student-led discussions of RNA-related problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM/BMOLCHEM/M M & I 914 – SEMINAR-MOLECULAR SCIENCES (ADVANCED)**

1 credit.

During the fall semester, molecular biosciences trainees who have not achieved dissertator status will present seminars based primarily on literature related to their projects. During the spring semester, molecular biosciences trainees with dissertator status will present seminars based upon their own research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**BIOCHEM/B M E/B M I/CBE/COMP SCI/GENETICS 915 – COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**

1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOCHEM 916 – CELLULAR MECHANISMS OF PROTEIN BIOGENESIS AND TRAFFICKING**

1 credit.

Recent literature relating to cellular aspects of the regulation of protein biogenesis including protein synthesis, folding, modification, degradation and trafficking, as well as function of molecular chaperones, will be presented and discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019



### **BIOCHEM/MICROBIO 917 – REGULATION OF GENE EXPRESSION (ADVANCED SEMINAR)**

1 credit.

Analysis of recent literature in topics related to prokaryotic and eukaryotic gene regulation, including regulation of transcription, translation, and genome organization.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **BIOCHEM/CHEM 918 – SINGLE MOLECULE APPROACHES TO BIOLOGY**

1 credit.

A combination of recent literature and original research presentations relating to the use of single molecule techniques in biochemistry including fluorescence microscopy, tethered particle motion, patch-clamping, cryo-electron microscopy, optical trapping, magnetic tweezers, and super resolution microscopy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **BIOCHEM 919 – SYNTHETIC BIOLOGY SEMINAR**

1 credit.

Synthetic biology is a burgeoning field encompassing understanding and designing biological systems spanning from biomolecules to ecosystems. It builds on advances in molecular and cellular technologies to revolutionize biological engineering in the same way that organic synthesis transformed chemistry and integrated circuit design transformed computing. Synthetic biology has the potential to address many of society's grand challenges including: understanding human disease, sustainable biomanufacturing, medical diagnostics and therapeutics, programming mammalian cell behaviors, engineering living materials, information storage, carbon sequestration, and energy generation. Latest advances in the field will be reviewed by covering literature including but not limited to biomolecular design, sequence-structure-function relationship, regulatory and signaling networks, metabolic engineering, interactions in microbial communities, cell-based therapeutics and genome design.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **BIOCHEM 924 – MEMBRANE PROTEIN STRUCTURE AND FUNCTION**

1 credit.

Membrane proteins comprise over a fourth of proteins encoded in any given genome, providing many vital functions to all cells. For example, ion channels and pumps modulate the membrane potential and help conduct information via nerves and other long distance conducting tissue. Transporters mediate the uptake and secretion of molecules. Receptors, such as G protein coupled receptors and receptor protein kinases, transfer information about the environment to the inside of the cell. Membrane proteins also contribute to the shape of the cell, the structure of the membrane and a myriad of other functions. Structure/function relationships for this critical class of proteins are discussed, addressing questions such as "how do membrane proteins fold?", "how do certain important classes of membrane proteins work?", "what are the challenges in studying membrane proteins" and "what methods are available for studying their biophysical properties?"

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **BIOCHEM/CBE 932 – BIOTECHNOLOGY TRAINING PROGRAM SEMINAR**

1 credit.

Biotechnology Training Program trainees will present their research for critical review by audience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **BIOCHEM/CHEM 945 – SEMINAR-CHEMICAL BIOLOGY (ADVANCED)**

1 credit.

Presentations and discussions of recently published research in chemical biology and related areas.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **BIOCHEM 990 – RESEARCH**

1-12 credits.

Independent laboratory research in preparation of a graduate thesis or dissertation under supervision of a faculty member.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# BIOLOGICAL SYSTEMS ENGINEERING (BSE)

## BSE 1 – COOPERATIVE EDUCATION PROGRAM

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide a background upon which to base a professional career.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## BSE 170 – PRODUCT DESIGN PRACTICUM

2 credits.

Work in small groups to design, fabricate, and test a device that solves a real world problem. Includes retrieval techniques, specification writing, methods for enhancing creativity, selection methodologies, safety engineering, sustainability in design, shop safety, fabrication equipment and techniques, and oral and written communication.

**Requisites:** Declared in Biological Systems Engineering BS or classified as Pre-Biological Systems Engineering

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BSE 243 – OPERATING AND MANAGEMENT PRINCIPLES OF OFF-ROAD VEHICLES

3 credits.

Principles of operation of internal combustion engines, fuel metering, cooling, lubrication, clutches, mechanical and hydrostatic transmissions, final drives, hydraulics systems and traction systems. Selection and management of off-road vehicles for agriculture, construction, lawncare and turfgrass industries.

**Requisites:** MATH 112, 114, or 217

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

## BSE 249 – ENGINEERING PRINCIPLES FOR BIOLOGICAL SYSTEMS

3 credits.

Applications of basic engineering principles such as mass and energy balances, psychrometric heat and mass transfer and fluid flow to problems encountered in agricultural and biological systems including grain conditioning, fruit and vegetable storage, food processing, animal housing, and environmental control.

**Requisites:** MATH 217, 221, or 275

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BSE 270 – INTRODUCTION TO COMPUTER AIDED DESIGN

3 credits.

Introduction to computer aided design (CAD) concepts and techniques, including two- and three-dimensional drawing presentation, methods of graphic communication and design synthesis. Specific topics include parametric solid modeling, part design, survey data and surface construction, orthographic drawings, dimensioning rules and drawing standards, assemblies, and animation.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BSE 289 – HONORS INDEPENDENT STUDY

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area of Biological Systems Engineering. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

## BSE 299 – INDEPENDENT STUDY

1-3 credits.

Research work for students under direct guidance of a faculty member in an area of Biological Systems Engineering. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## BSE 301 – LAND INFORMATION MANAGEMENT

3 credits.

An introduction to land information management through the principles of geospatial technologies and methods for analysis and interpretation of geospatial data. Includes both the basic land surveying technology and advanced remote observation of land resources by airborne and space-based sensors.

**Requisites:** MATH 113, 114, or 217

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BSE 308 – CAREER MANAGEMENT FOR ENGINEERS

1 credit.

Develop engineering career and life skills in time management, housing selection, financial management, the job search process, professional networking, branding and social media presence, professional development and professional society membership, leadership, professional ethics, and registration/licensure. Understand future trends in digital technology, climate change, diversity, and sustainability and how they affect career opportunities in the engineering field.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BSE 310 – PROJECT ECONOMICS & DECISION ANALYSIS**

3 credits.

Evaluation techniques for research, development engineering projects. Covers the time value of money and other cash-flow concepts, capital budgeting, economic practices and techniques used to evaluate and optimize decisions, and research development project portfolio management techniques.

**Requisites:** MATH 113, 114, or (MATH 171 and 217)**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE/AN SCI 344 – DIGITAL TECHNOLOGIES FOR ANIMAL MONITORING**

3 credits.

Introduces key concepts of sensor technology used for livestock and companion animal monitoring and veterinary medicine. Describes applications of Artificial Intelligence (AI) systems for livestock animals and veterinary medicine, including animal monitoring, computer-aided diagnosis, and optimized farm management decisions.

**Requisites:** (MATH 112, 114, 171, or placement into MATH 221) or graduate/professional standing**Repeatable for Credit:** No**BSE 349 – QUANTITATIVE TECHNIQUES FOR BIOLOGICAL SYSTEMS**

3 credits.

Principles of how energy and materials are utilized in Cells, organisms and ecosystems. Mass transfer, heat and energy balances applied to cell metabolism, plants, and ecosystems. Quantification of biological processes to allow manipulation for human benefit.

**Requisites:** MATH 222, (CHEM 104, 109, or 116), and (ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151, ZOOLOGY 153, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, MICROBIO 101, or ZOOLOGY/BOTANY/ENVIR ST/BOTANY/ZOOLOGY 260)**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 351 – STRUCTURAL DESIGN FOR AGRICULTURAL FACILITIES**

3 credits.

Introduction to agricultural building codes and loads; structural analysis; wood, concrete and soil properties; wood and reinforced concrete design; construction specifications.

**Requisites:** EMA 201 or graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**BSE 364 – ENGINEERING PROPERTIES OF FOOD AND BIOLOGICAL MATERIALS**

3 credits.

Study of various physical, mechanical, thermal and other properties of food and biological materials. Importance of such property values on the design and operation of various food and bioprocess engineering systems.

**Requisites:** (BSE 249 or CBE 250) and (ME 361 or CBE 310)**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 365 – MEASUREMENTS AND INSTRUMENTATION FOR BIOLOGICAL SYSTEMS**

3 credits.

Principles of instrumentation and measurement systems, analysis of experimental data, electronic components, instrumentation for measuring various parameters of biological systems (e.g., temperature, force, flow).

**Requisites:** Declared in Biological Systems Engineering or Environmental Engineering BS**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE/ENVIR ST 367 – RENEWABLE ENERGY SYSTEMS**

3 credits.

Learn about the state-of-the-art in renewable energy applications including biomass for heat, electric power and liquid fuels as well as geo-energy sources such as wind, solar, and hydro power. Practice engineering calculations of power and energy availability of renewable energy sources and learn about requirements for integrating renewable energy sources into production, distribution and end-use systems.

**Requisites:** MATH 112, 114, 217, placement into MATH 221, or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE/CIV ENGR/SOIL SCI 372 – ON-SITE WASTE WATER TREATMENT AND DISPERSAL**

2 credits.

On-site treatment and dispersal of waste water from homes, commercial sources and small communities. Sources, pretreatment units, nutrient removal units, constructed wetlands, surface and soil dispersal systems, recycle and reuse systems, regulations, alternative collection systems.

**Requisites:** CHEM 103, 109, or 115**Repeatable for Credit:** No**Last Taught:** Fall 2022

**BSE 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**BSE 380 – INTRODUCTORY DATA SCIENCE FOR THE AGRICULTURAL AND LIFE SCIENCES**

3 credits.

Agricultural and life scientists need to creatively apply physical, chemical, and biological principles to address technical, business, and environmental challenges. Many of these challenges involve numerical analyses, including the interpretation of large datasets. The fundamentals of computer coding using numerical software will be taught, using real-world data science challenges from the agricultural and life sciences.

**Requisites:** (CHEM 103, 109, or 115) and (MATH 112, 114, 217 or placement into MATH 211 or 221)**Repeatable for Credit:** No**Last Taught:** Fall 2022**BSE 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under the guidance of a faculty or instructional academic staff member in BSE and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**BSE 400 – STUDY ABROAD IN BIOLOGICAL SYSTEMS ENGINEERING**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**BSE 405 – INTELLIGENCE AND AUTOMATION IN AGRICULTURE**

3 credits.

The promise of digital agriculture is the ability to evaluate the system on a holistic basis and generate tools that allow for improved decision making in every sub-process. Rapid developments in machinery have expanded the scale, speed, and productivity of agricultural machines. Recent advances in sensors, mechatronics and data computing technologies will increase agricultural productivity and build sustainability. Topics related to data acquisition and processing with agricultural intelligent systems will be covered.

**Requisites:** BSE 380, COMP SCI 310, or graduate/professional standing**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 460 – BIOREFINING: ENERGY AND PRODUCTS FROM RENEWABLE RESOURCES**

3 credits.

Concepts, processes, status quo and future direction of biorefining for production of energy (fuels), chemicals and materials from biomass, with emphases on chemical, biological and engineering aspects of the biorefining.

**Requisites:** (CHEM 104 or 109) and (CHEM 341 or 343), or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 461 – FOOD AND BIOPROCESSING OPERATIONS**

3 credits.

Principles of mechanics, fluid dynamics, and heat and mass transfer as applied to food and bioprocessing operations. Specific focus on unit operations and equipment associated with the products key to Wisconsin industries including pulp and paper, dairy products, ethanol, forage, and grain.

**Requisites:** (BSE 249 or CBE 250), (CIV ENGR 310, CBE 320, or M E 363), or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**BSE 464 – HEAT AND MASS TRANSFER IN BIOLOGICAL SYSTEMS**

3 credits.

Introduction to heat and mass transfer fundamentals, including transport mechanisms of conduction, convection, radiation, diffusion and evaporation. Development of governing equations and boundary conditions with application to living systems, controlled environments, water systems, and food processing. Introduction to, and application of, finite-difference and finitevolume methods, including computational fluid dynamics (CFD).

**Requisites:** (M E 361 or CBE 310) and (M E 363, CBE 320, or CEE 310)**Repeatable for Credit:** No**Last Taught:** Spring 2023

**BSE 472 – SEDIMENT AND BIO-NUTRIENT ENGINEERING AND MANAGEMENT**

3 credits.

Hydrologic, biologic and engineering applications in the design and management of sediment and bio-nutrient control systems.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 473 – WATER MANAGEMENT SYSTEMS**

3 credits.

Engineering and management applications of soil-plant-water relationships applied to water management systems and efficient water use.

**Requisites:** MATH 217, 221, 275, or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**BSE/M E 474 – FLUID POWER**

3 credits.

Engineering principles of design and analysis of fluid power systems and fluid power components. Topics include hydraulic fluid properties, fluid flow and, positive displacement pumps, valves for pressure, flow, and directional control, linear and rotary actuators, accumulators, pressure compensation, load sensing, energy management and system efficiency.

**Requisites:** M E 363, CIV ENGR 310, CBE 320, graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**BSE/M E 475 – ENGINEERING PRINCIPLES OF AGRICULTURAL MACHINERY**

3 credits.

Engineering design principles of machines for the production, processing and handling of crops for food, fuel, bio-mass and fiber. Environmental and biological factors that influence machine design and operation. Economic and capacity analysis of machines and systems.

**Requisites:** Declared in Biological Systems Engineering or Mechanical Engineering and (M E 240, E M A 202, PHYSICS 201, 207, or 247), graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**BSE/M E 476 – ENGINEERING PRINCIPLES OF OFF-ROAD VEHICLES**

3 credits.

Engineering design principles of heavy-duty vehicles intended for off-road use: fuels, engine cycles, engine principles and construction, clutches, mechanical and hydrostatic transmissions, final drives, traction systems, traction modeling, dynamic behavior, suspension systems and braking.

**Requisites:** (M E 361 or concurrent enrollment), (M E 240, E M A 202, PHYSICS 201, 207, or 247), and declared in Biological Systems Engineering or Mechanical Engineering or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 508 – BIOLOGICAL SYSTEMS ENGINEERING DESIGN PRACTICUM I**

2 credits.

Overview of the engineering design process including problem identification, information retrieval, specification writing, development and analysis of alternative solutions, selection methodology, product safety, standardization, scheduling and cost estimating. Develop design project proposals for real-world design problems.

**Requisites:** Declared in Biological Systems Engineering BS**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 509 – BIOLOGICAL SYSTEMS ENGINEERING DESIGN PRACTICUM II**

3 credits.

Individual or team work on a biological systems engineering design project: problem identification, information retrieval, specification writing, development and analysis of alternative solutions, selection methodology.

**Requisites:** Senior standing and BSE 508**Repeatable for Credit:** No**Last Taught:** Fall 2022**BSE 571 – SMALL WATERSHED ENGINEERING**

3 credits.

Application of engineering principles to small, ungauged watershed analysis. Application of hydrologic and sedimentologic principles to upland watersheds for run-off and sediment control.

**Requisites:** MATH 222 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for undergraduate students in an Honors program completing a thesis in the area of Biological Systems Engineering, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions

**BSE 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Biological Systems Engineering, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**BSE 691 – SENIOR THESIS**

2 credits.

Individual study for undergraduate students completing a thesis in the area of Biological Systems Engineering, as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**BSE 692 – SENIOR THESIS**

2 credits.

Second semester of individual study for undergraduate students completing a thesis in the area of Biological Systems Engineering, as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**BSE 699 – SPECIAL PROBLEMS**

1-4 credits.

Individual advanced work in an area of Biological Systems Engineering under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**BSE 799 – PRACTICUM IN AGRICULTURAL ENGINEERING TEACHING**

1-3 credits.

Hands-on teaching experience through working with a course instructor to improve pedagogical understanding. Guidance will be provided on such aspects as course planning, delivery, student supervision, and evaluation, etc.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**BSE 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BSE 900 – SEMINAR**

1 credit.

Provides an overview of research-related activities and resources available to graduate students in the department, college, and on campus. Includes library resources, statistical consulting, professional development, research proposal development, thesis writing, technical presentation, etc.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**BSE 901 – GRADUATE RESEARCH SEMINAR**

1 credit.

Presentation, evaluation, and discussion of Biological Systems Engineering graduate student thesis and non-thesis research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 10 number of completions**Last Taught:** Spring 2023**BSE 990 – RESEARCH**

1-12 credits.

Independent laboratory research in preparation of a graduate thesis under supervision of a faculty member

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BSE 999 – SPECIAL PROBLEMS**

1-3 credits.

In-depth study of a research or design and development problem under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



# BIOLOGY (BIOLOGY)

## BIOLOGY/ZOOLOGY 101 – ANIMAL BIOLOGY

3 credits.

General biological principles. Topics include: evolution, ecology, animal behavior, cell structure and function, genetics and molecular genetics and the physiology of a variety of organ systems emphasizing function in humans.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151 or 152

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOLOGY/ZOOLOGY 102 – ANIMAL BIOLOGY LABORATORY

2 credits.

General concepts of animal biology at an introductory level emphasizing the evolutionary relationships between animals. Learn about general body plans and strategies used to accomplish the basic tasks of staying alive in major animal groups using preserved and live animals. Study the diversity within each group of animals by integrating the body plans with the lifestyle and ecology of animals. Dissections of earthworm, freshwater mussel, squid, sea star, and rat aid the study of these general principles.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151 or 152

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOLOGY/BOTANY 130 – GENERAL BOTANY

5 credits.

Introduction to the basic principles and concepts of the biology of plants. an integrative approach stressing evolutionary sequences and the relationship between structure and function at succeeding levels of organization: molecule, cell, organism, population, community. Correlated lectures, laboratories, and discussions.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOLOGY/BOTANY/ZOOLOGY 151 – INTRODUCTORY BIOLOGY

5 credits.

Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/ZOOLOGY 101, 102 or BOTANY/BIOLOGY/BOTANY 130

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOLOGY/BOTANY/ZOOLOGY 152 – INTRODUCTORY BIOLOGY

5 credits.

Topics include: selected topics in plant physiology, a survey of the five major kingdoms of organisms, speciation and evolutionary theory, and ecology at multiple levels of the biological hierarchy.

**Requisites:** BOTANY/BIOLOGY/ZOOLOGY/BIOLOGY/BOTANY 151

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOLOGY 299 – DIRECTED STUDIES

1-4 credits.

Introductory directed study as arranged with a faculty member. Open only to students declared in Biology.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## BIOLOGY 375 – SPECIAL TOPICS

1-5 credits.

Introductory special topics on contemporary issues relevant to studying biology.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BIOLOGY 399 – INTERNSHIP/FIELD EXPERIENCE**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**BIOLOGY/GENETICS 522 – COMMUNICATING EVOLUTIONARY BIOLOGY**

2-3 credits.

Exposure to diverse topics in contemporary evolutionary biology and development of critical thinking and communication skills. Most weeks guest lecturers present their own primary research on a specialized topic in evolutionary biology. Seminars include perspectives from genetics, ecology, geoscience, zoology, botany, microbiology, systematics, molecular biology, and integrative research. Some weeks feature special topics and discussions on pedagogical, legal, outreach, or other issues in evolutionary biology. Includes thinking critically about methodology, experimental design and interpretation, and how conclusions are reached in evolutionary biology by reading primary and secondary literature, attending seminars, discussing topics with speakers and other students, and preparing a written report. The 3-credit version of the course delves deeper into communication of evolutionary biology to researchers, undergraduates, K-12 students, and the general public.

**Requisites:** GENETICS 466, 468, ANTHRO/BOTANY/ZOOLOGY/ ANTHRO/BOTANY 410, or BIOCORE 381, or concurrent enrollment**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOLOGY 675 – SPECIAL TOPICS**

1-5 credits.

Intermediate special topics on contemporary issues relevant to studying biology.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**BIOLOGY 681 – SENIOR HONORS THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member for an Honors program. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**BIOLOGY 682 – SENIOR HONORS THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member for an Honors program. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOLOGY 691 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BIOLOGY 692 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**BIOLOGY 699 – DIRECTED STUDIES**

1-4 credits.

Advanced directed study as arranged with a faculty member. Open only to students declared in Biology.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022

# BIOLOGY CORE CURRICULUM (BIOCORE)

## BIOCORE 181 – BECOMING A SCIENTIST: DOING BIOLOGY RESEARCH

2 credits.

Orientation to biology research on campus, work in a research team to investigate a novel research question, and do biology research on a choice of topics: from ecology and physiology to cell biology. Emphasis is on critical thinking required in designing and conducting experiments, analyzing and interpreting data, and communicating findings orally and in writing.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOCORE 381 – EVOLUTION, ECOLOGY, AND GENETICS

3 credits.

Basic principles of ecology and interrelations between individuals, populations, communities, ecosystems and their environment; transmission genetics and introduction to population genetics; origin of life, evolutionary mechanisms, ancestral relationships among species, and the diversity of life.

**Requisites:** Declared in Biology Core Curriculum Honors Certificate

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BIOCORE 382 – EVOLUTION, ECOLOGY, AND GENETICS LABORATORY

2 credits.

Writing-intensive with opportunities to make observations and generate and test questions. Includes ecology field trips and research projects that focus on genetics and evolution.

**Requisites:** BIOCORE 381 or concurrent enrollment

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BIOCORE 383 – CELLULAR BIOLOGY

3 credits.

Cellular and molecular basis of life. The main themes are the structure and function of cells and organelles, the flow of energy in cells, and the storage, expression, and regulation of genetic information.

**Requisites:** BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOCORE 384 – CELLULAR BIOLOGY LABORATORY

2 credits.

Writing-intensive with opportunities to generate and test questions utilizing concepts and procedures of cell biology. Includes research projects in subcellular fractionation, protein structure and enzyme catalysis, molecular genetics of *C.elegans* worms, and signal transduction in yeast.

**Requisites:** BIOCORE 383 or concurrent enrollment

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BIOCORE 401 – PEER MENTORING

1 credit.

Develops mentoring, group facilitation, leadership, and interpersonal skills used in peer learning and leading mentored study groups. Focuses on the pedagogy, skills, and effective techniques used to facilitate learning in small groups. Discuss lower order to higher order cognitive levels using Blooms Taxonomy, and reciprocal mentor observations.

**Requisites:** BIOCORE 381, 383, and (BIOCORE 382 or 384)

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## BIOCORE 485 – PRINCIPLES OF PHYSIOLOGY

3 credits.

Study the physiology of and consider how plants and animals interact with their environments to survive, obtain nutrients, exchange gases, and reproduce, also how the complex systems of neural and endocrine regulation in animals and hormonal and environmental regulation in plants allow cells and organs to communicate.

**Requisites:** BIOCORE 383

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCORE 486 – PRINCIPLES OF PHYSIOLOGY LABORATORY**

2 credits.

Experience the process of science by collaborating on independent experiments to investigate your questions about animal and plant physiology. Emphasis is on critical thinking required in designing and conducting experiments, analyzing and interpreting data, and communicating findings orally and in writing.

**Requisites:** BIOCORE 485 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BIOCORE 587 – BIOLOGICAL INTERACTIONS**

3 credits.

A capstone course to build on and integrate the knowledge and skills gained in previous Biocore coursework through readings and analysis of primary scientific literature. Work in small groups to analyze current and emerging topics through the lens of scientific research. Topics include signaling pathways, systems biology, genetic disease, and cancer.

**Requisites:** BIOCORE 485

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BIOCORE 699 – DIRECTED STUDY**

1-3 credits.

Independent mentored study as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## BIOMEDICAL ENGINEERING (B M E)

**B M E 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations providing a background upon which to base a professional career in industry.

**Requisites:** Sophomore standing

**Course Designation:** Workplace – Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E 200 – BIOMEDICAL ENGINEERING DESIGN**

2 credits.

Collaborate with students in B M E 300 on a client-centered biomedical engineering design project to learn concept generation, product analysis, specifications, evaluation, regulation, and ethics.

**Requisites:** Sophomore standing and declared in Biomedical Engineering

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 201 – BIOMEDICAL ENGINEERING DESIGN AND FUNDAMENTALS**

3 credits.

Fundamentals of biomedical engineering and principles of design including the design process, standards, documentation, inclusion in design and research methods. Hands-on skills including electronics, programming, computer-aided design, machining, safety training, microscopy, cell and tissue engineering principles and fabrication of physical prototypes.

**Requisites:** B M E 200

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 300 – BIOMEDICAL ENGINEERING DESIGN AND LEADERSHIP**

3 credits.

Work on a client-centered biomedical engineering design project to learn leadership styles, concept generation, product analysis, specifications, evaluation, regulation, and ethics. Provide leadership and mentorship to students in B M E 200.

**Requisites:** B M E 201

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 301 – BIOMEDICAL ENGINEERING DESIGN AND COMMUNICATION**

3 credits.

Technical communication for biomedical engineering practice applied to real-world, client-based projects including research methods, documentation, preparing and critiquing reports, ethical problem solving, diversity and inclusion, presenting, and professional development.

**Requisites:** Satisfied Communications A requirement and B M E 201

**Course Designation:** Gen Ed – Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 310 – BIOINSTRUMENTATION**

3 credits.

Bioinstrumentation covering clinical and research measurements.

Laboratory experiments complement the lectures.

**Requisites:** (CHEM 104, 109, or 116), (MATH 222 or 276) and

(PHYSICS 202, 208, or 248), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 315 – BIOMECHANICS**

3 credits.

An introduction to the mechanical behavior of biological tissues and systems. Specific topics include: structure and function of biological tissues, mechanical properties of biological tissues, and analysis of specific tissues (i.e. bone, muscle, and soft connective tissues).

**Requisites:** (E M A 303 or M E 306), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 325 – APPLIED STATISTICS FOR BIOMEDICAL ENGINEERS**

3 credits.

Learn and apply the fundamentals of descriptive and inferential statistics to analyze data and present the results in appropriate graphical formats. Emphasis will be on applications commonly encountered in biomedical engineering including t-tests, linear regression, analysis of variance, diagnostic tests, ROC curves, and methods for graphing and presenting data. Examples and practice problems will be drawn from biomedical research. Learn how to analyze data and interpret statistical analysis presented in research papers, and will get practical hands-on experience implementing these tools during class in a computer lab setting.

**Requisites:** Declared in Biomedical Engineering and (MATH 222 or 276)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 330 – ENGINEERING PRINCIPLES OF MOLECULES, CELLS, AND TISSUES**

4 credits.

Introduction to the fundamental principles of kinetics and transport that are relevant for the analysis of biological systems. Topics covered include concepts of reaction rate, stoichiometry, equilibrium, momentum/mass transport, and the interaction between transport and kinetics in biological systems.

**Requisites:** (E M A 201, PHYSICS 201, 207, or 247), (MATH 319, 320, or 375) and (CHEM 104, 109, or 116), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 389 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E 399 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E 400 – CAPSTONE DESIGN COURSE IN BIOMEDICAL ENGINEERING**

3 credits.

Applies classroom study and prior design course experiences for senior teams to solve a directed client-based biomedical engineering design project.

**Requisites:** (B M E 300 or B M E 301) and (B M E 310, 315, or B M E/PHM SCI/B M E 430)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 402 – BIOMEDICAL ENGINEERING CAPSTONE DESIGN II**

3 credits.

Work in a team to evaluate, refine, document and present the client-centered biomedical engineering design started in B M E 400.

**Requisites:** B M E 400

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/M E 414 – ORTHOPAEDIC BIOMECHANICS - DESIGN OF ORTHOPAEDIC IMPLANTS**

3 credits.

Apply the design process for orthopaedic implants (total joint replacements). Topics include: library skills; joint anatomy; tissue properties; surgical approach; joint loading; implants materials; preclinical testing and analysis.

**Requisites:** Senior standing and (M E 306 or E M A 303), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/M E 415 – BIOMECHANICS OF HUMAN MOVEMENT**

3 credits.

An overview of experimental and modeling techniques used to study human movement. Specific topics will include locomotion, motion capture systems, force plates, muscle mechanics, musculoskeletal modeling, three dimensional kinematics, inverse dynamics, forward dynamic simulation and imaging based biomechanics. Homework and laboratory activities emphasize applications of movement biomechanics in orthopedics and rehabilitation.

**Requisites:** B M E 315 and M E 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/PHM SCI 430 – BIOLOGICAL INTERACTIONS WITH MATERIALS**

3 credits.

Addresses the range of materials currently being utilized for various biomedical applications, the biological systems governing biomaterial applications, analytical techniques pertinent to biomaterial evaluation, and selected major medical applications in which biomaterials play an important role.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 383) and (CHEM 341 or 343)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/E C E 462 – MEDICAL INSTRUMENTATION**

3 credits.

Design and application of electrodes, biopotential amplifiers, biosensors, therapeutic devices. Medical imaging. Electrical safety. Measurement of ventilation, blood pressure and flow.

**Requisites:** E C E 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/E C E 463 – COMPUTERS IN MEDICINE**

3 credits.

Study of microprocessor-based medical instrumentation. Emphasis on real-time analysis of electrocardiograms. Labs and programming project involve design of biomedical digital signal processing algorithms. Knowledge of computer programming language like C, C++ or Java, strongly encouraged.

**Requisites:** E C E 330 and (COMP SCI 200, 220, 300, 301, or placement into COMP SCI 300), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 489 – HONORS IN RESEARCH**

1-3 credits.

Biomedical engineering undergraduate honors research projects supervised by faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E/H ONCOL/MED PHYS/PHYSICS 501 – RADIATION PHYSICS AND DOSIMETRY**

3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry.

**Requisites:** (PHYSICS 323, 449 and MATH 320) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/M E 505 – BIOFLUIDICS**

3 credits.

Introduction to the physics of biological fluid flow with an emphasis on the cardiovascular system including blood rheology, pulsatile flow, wave travel, and topics relevant to blood flow measurement and biomedical device design.

**Requisites:** B M E 330, CBE 320, M E 363, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 510 – INTRODUCTION TO TISSUE ENGINEERING**

3 credits.

Overview of tissue engineering, including discussion of cell sources, cell-material interactions, tailoring biomaterials, methods of culture and characterization of engineering tissues, ethical issues, concluding with case studies of specific types of tissue engineering. Optional laboratory exercises offered throughout semester.

**Requisites:** B M E/PHM SCI 430, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 511 – TISSUE ENGINEERING LABORATORY**

1 credit.

Tissue engineering refers to the generation of biological substitutes to restore, maintain, or improve tissue function. Laboratory techniques are multi-disciplinary, from basic biological sciences, engineering, and biotechnology. Engineering approaches and analysis will be applied to these techniques.

**Requisites:** B M E 510 or concurrent enrollment, or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**B M E 515 – THERAPEUTIC MEDICAL DEVICES**

1 credit.

Design of medical devices to treat pathology.

**Requisites:** Junior standing and (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**B M E/M E 516 – FINITE ELEMENTS FOR BIOLOGICAL AND OTHER SOFT MATERIALS**

3 credits.

Finite element modeling of soft materials, with an emphasis on biological tissues. Basics of the finite element method, verification and validation methods, and selection of constitutive models. Emphasis on finite element modeling for materials that are generally nonlinear, and that generally undergo large deformation.

**Requisites:** (M E 306 or E M A 303), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**B M E 517 – BIOLOGY IN ENGINEERING SEMINAR**

1 credit.

Current topics at the interface of biology and engineering with special emphasis on the ways in which engineers have contributed to knowledge and advances in biology.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 520 – STEM CELL BIOENGINEERING**

3 credits.

Covers engineering approaches that are used to understand and manipulate stem cells. Concepts covered include: introduction to stem cell biology, quantitative modeling of stem cell signaling, methods to engineer the stem cell microenvironment, and the role of stem cells in tissue development and regeneration.

**Requisites:** (MATH 319 or 320), (ZOOLOGY 470, 570, or BIOCORE 383), and (CHEM 341 or 343), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/MED PHYS 530 – MEDICAL IMAGING SYSTEMS**

3 credits.

2D Fourier image representation, sampling, and image filtering with applications in medical imaging. Principles of operation, impulse responses, signal-to-noise, resolution and design tradeoffs in projection radiography, tomography, nuclear medicine, ultrasound, and magnetic resonance imaging.

**Requisites:** Graduate/professional standing or (E C E 330 or B M E/MED PHYS/B M E 573)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/MED PHYS 535 – INTRODUCTION TO ENERGY-TISSUE INTERACTIONS**

3 credits.

Explore physical interactions between thermal, electromagnetic and acoustic energies and biological tissues with emphasis on therapeutic medical applications.

**Requisites:** PHYSICS 202, 208, 248, or MED PHYS/PHYSICS/MED PHYS 265, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 545 – ENGINEERING EXTRACELLULAR MATRICES**

3 credits.

Overview of the structure, function and biophysical properties of extracellular matrix (ECM) proteins, followed by discussion of how control or manipulation of ECM protein expression and distribution impacts on cell and tissue function, concluding with impacts of engineering ECM for regenerative medicine.

**Requisites:** B M E/PHM SCI 430, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 550 – INTRODUCTION TO BIOLOGICAL AND MEDICAL MICROSYSTEMS**

3 credits.

Introduction to the field of MEMS (Micro-Electro-Mechanical-Systems), as it applies to biology and medicine. Topics will cover methodology of traditional MEMS devices, how they can be incorporated with biological systems, and methods for micro-structuring biological materials.

**Requisites:** B M E 310 and (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 383), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 556 – SYSTEMS BIOLOGY: MAMMALIAN SIGNALING NETWORKS**

3 credits.

Introduction to the experimental and mathematical modeling techniques used in systems biology through lectures and critical analyses of relevant publications with a primary focus on gene/protein networks and mammalian systems.

**Requisites:** (MATH 319, 320, or 375), (B M E 510, ZOOLOGY 470, 523, 570, or BIOCORE 383) and Junior Standing, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**B M E/CBE 560 – BIOCHEMICAL ENGINEERING**

3 credits.

Properties of biological molecules; enzyme kinetics, enzyme reactors, and enzyme engineering; metabolic engineering; microbial growth kinetics; bioreactor design; bioseparations.

**Requisites:** Junior standing and (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 383), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/I SY E 564 – OCCUPATIONAL ERGONOMICS AND BIOMECHANICS**

3 credits.

Introduces engineers how to design manufacturing and industrial operations in which people play a significant role, so that human capabilities are maximized, physical stress is minimized, and workload is optimized. Examples and topics emphasize industrial applications.

**Requisites:** I SY E/PSYCH/I SY E 349 or B M E 315, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**B M E/MED PHYS 566 – PHYSICS OF RADIOTHERAPY**

3 credits.

Ionizing radiation use in radiation therapy to cause controlled biological effects in cancer patients. Physics of the interaction of the various radiation modalities with body-equivalent materials, and physical aspects of clinical applications.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/MED PHYS 567 – THE PHYSICS OF DIAGNOSTIC RADIOLOGY**

4 credits.

Physics of x-ray diagnostic procedures and equipment, radiation safety, general imaging considerations; lecture and lab.

**Requisites:** MATH 234 and (PHYSICS 241 or 249) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**B M E/MED PHYS 568 – MAGNETIC RESONANCE IMAGING (MRI)**

2 credits.

Core course covering the physics associated with magnetic resonance imaging emphasizing techniques employed in medical diagnostic imaging. Major MRI topics include: physics of MR, pulse sequences, hardware, imaging techniques, artifacts, and clinical applications. At the completion of this course, students should have an understanding of the technical and scientific details of modern magnetic resonance imaging and its use in diagnosing disease. Graduate students who have not taken MATH 222 and PHYSICS 202 at UW-Madison must have the equivalent coursework in order to be successful in this course.

**Requisites:** Graduate/professional standing or (MATH 222 and PHYSICS 202, 208, 241, 244, 248 or 249)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**B M E/MED PHYS 573 – MATHEMATICAL METHODS IN MEDICAL PHYSICS**

3 credits.

Mathematical fundamentals required for medical physics and biomedical applications, including signal analysis and mathematical optimization.

**Requisites:** (MATH 234 and 319), (MATH 234 and 320), or MATH 376 and (PHYSICS 202 or 208), graduate/professional standing, or declared in Medical Physics VISP

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/MED PHYS 574 – DATA SCIENCE IN MEDICAL PHYSICS**

3 credits.

Concepts and principles of statistics and machine learning for medical physics-related research problems. Topics covered include probability and independence, discrete and continuous random variables and statistical distributions, random sampling and central limit theorem, inference for means, variances, proportions, moment generating functions, maximum likelihood, hypothesis testing, ANOVA, linear regression, correlation and basic design of experiments with application to quality assurance, reliability, and reproducibility.

**Requisites:** (MED PHYS/B M E/H ONCOL/PHYSICS/B M E/H ONCOL/MED PHYS 501 and MED PHYS/B M E/MED PHYS 573) or (MATH/STAT/MATH 309 or 431) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/MED PHYS 575 – DIAGNOSTIC ULTRASOUND IMAGING**

2 credits.

Propagation of ultrasonic waves in biological tissues; principles of ultrasonic measuring and imaging instrumentation; design and use of currently available tools for performance evaluation of diagnostic instrumentation; biological effects of ultrasound.

**Requisites:** Graduate/professional standing or (MATH 234, 319, or 320 and PHYSICS 202 or 208)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**B M E/MED PHYS 578 – NON-IONIZING DIAGNOSTIC IMAGING**

4 credits.

Covers the physics associated with magnetic resonance imaging and diagnostic ultrasound emphasizing techniques employed in medical diagnostic imaging. Major MRI topics include: physics of MR, pulse sequences, hardware, imaging techniques, artifacts, and spectroscopic localization. Ultrasound based topics covered include: propagation of ultrasonic waves in biological tissues, principles of ultrasonic measuring and imaging instrumentation, design and use of currently available tools for performance evaluation of diagnostic instrumentation, and biological effects of ultrasound. Gain an understanding of the technical and scientific details of modern non-ionizing medical magnetic resonance and ultrasound devices and their use in diagnosing disease.

**Requisites:** MATH 234, (MATH 319 or 320) and (PHYSICS 202, 208, 241 or 248), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/MED PHYS 580 – THE PHYSICS OF MEDICAL IMAGING WITH IONIZING RADIATION**

4 credits.

Concepts and principles on the physics of medical imaging systems that form images using high energy photons are presented. Such systems are divided into two categories: (1) those based on the transmission of x-rays through the human body, including radiography, mammography, fluoroscopy, and computed tomography (CT), and (2) those based on the emission of gamma rays or annihilation radiation following radioactive decay of an internal radiolabeled molecule, including the gamma camera, single photon emission tomography (SPECT), and positron emission tomography (PET) and PET hybrid imaging systems. Emphasis is placed on understanding how physics, system design, and imaging technique determine image performance metrics such as contrast, signal-to-noise ratio, and spatial resolution. Clinical applications and radiation safety concepts are detailed for the different types of imaging systems.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501 and B M E/MED PHYS/B M E 573

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 601 – SPECIAL TOPICS IN BIOMEDICAL ENGINEERING**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E 602 – SPECIAL TOPICS IN BIOMEDICAL ENGINEERING**

1-3 credits.

Special topics in biomedical engineering for graduate students or both graduate and undergraduate students together.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E/M E 603 – TOPICS IN BIO-MEDICAL ENGINEERING**

1-3 credits.

Various aspects of living systems of interest to the mechanical engineer, such as the mechanics of hearing and vision, cardiac and central nervous systems, artificial organs, blood flow behavior, and energy-transfer processes.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**B M E/M E 615 – TISSUE MECHANICS**

3 credits.

Focus on solid mechanics of prominent musculoskeletal and cardiovascular tissues. Their normal and pathological behaviors (stiffness, strength, relaxation, creep, adaptive remodeling, etc.) in response to physiologic loading will be examined and quantified.

**Requisites:** M E 306 or E M A 303, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/MED PHYS/PHMCOL-M/PHYSICS/RADIOL 619 – MICROSCOPY OF LIFE**

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

**Requisites:** PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 630 – NANOMATERIALS FOR BIOMEDICAL APPLICATIONS**

3 credits.

An in-depth discussion of the chemistry, structure, synthesis/fabrication, and properties of various types of nanomaterials (e.g., liposomes, polymer micelles, polymersomes, dendrimers, and a number of inorganic nanoparticles) and their applications in therapeutics (e.g., drug and gene delivery), diagnostics (e.g. biosensing and molecular imaging), and tissue engineering.

**Requisites:** B M E 510 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**B M E 640 – MEDICAL DEVICES ECOSYSTEM: THE PATH TO PRODUCT**

3 credits.

Development of medical devices for therapeutic or diagnostic purposes. Gap analysis, market analysis, reimbursement/distribution, regulatory approval, and manufacturing/supply chain development. Refinement and presentation of design ideas and corporate strategy within a team setting. Case studies of device design/manufacture including supply chain, intellectual property, pre-clinical testing, U.S. and European regulatory pathways and clinical trial design.

**Requisites:** B M E 402 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E 651 – BIOPHOTONICS LABORATORY**

3 credits.

Learn and apply the fundamentals of optical imaging, microscopy and instrumentation via practical hands-on training with a specific emphasis on the life-sciences applications. Topics include constructing imaging systems using fundamental optical tools and instruments, illumination and aberrations, microscopy techniques, resolution and contrast measurement, optical spectroscopy, nanophotonics, bioimaging and biosensing.

**Requisites:** PHYSICS 202, 208, 248, PHYSICS/MED PHYS/ PHYSICS 265, E C E 320, 434, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**B M E/I SY E 662 – DESIGN AND HUMAN DISABILITY AND AGING**

3 credits.

Design of products for persons with physical, sensory or cognitive impairments is covered as well as the design of standard mass market products. Interdisciplinary teams explore specific disabilities, then design a standard mass market product in competition with each other.

**Requisites:** Junior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/CRB 670 – BIOLOGY OF HEART DISEASE AND REGENERATION**

3 credits.

Presents diverse topics in contemporary heart biology to facilitate understanding of biological, mechanistic, and experimental concepts of cardiac physiology, disease, and regeneration. Learn cellular and molecular mechanisms underlying heart physiology, function, disease and regenerative ability in various model systems. Includes thinking critically about methodology, experimental design and interpretation, and how conclusions are reached in heart biology through cutting-edge literature.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 and BIOCHEM 501) or graduate/professional standing.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E 701 – SEMINAR IN BIOMEDICAL ENGINEERING**

1 credit.

Presentation of advancements in biomedical engineering research by leaders in the field, accompanied by critical analysis of related literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**B M E 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**B M E 703 – RESPONSIBLE CONDUCT OF RESEARCH FOR BIOMEDICAL ENGINEERS**

2 credits.

Develop an understanding of the elements involved in being a responsible member of the Biomedical Engineering research community. Topics include mentor/mentee relationships, identifying research problems, research integrity, ethics, regulations, and improving the scientific climate.

**Requisites:** Declared in Biomedical Engineering, Ph.D. or Biomedical Engineering: Research, M.S.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/MED PHYS 710 – ADVANCES IN MEDICAL MAGNETIC RESONANCE**

3 credits.

Addresses the theory and applications of magnetic resonance (MR) in medicine, by providing the necessary theoretical background to understand advanced MR techniques including magnetic resonance imaging (MRI).

**Requisites:** B M E/MED PHYS/B M E 568

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M E/M E 715 – ADVANCED TISSUE MECHANICS**

3 credits.

Central topics in solid mechanics applied to soft tissues, including analysis of strain in the setting of large deformations, computation of stress in multiple experimental loading configurations, constitutive modeling of biomaterials using hyperelastic strain-energy functions, modeling tissue growth and remodeling, and the main theories for soft tissue failure will be covered. Application of finite elasticity theory in practical laboratory situations, and key papers and concepts in soft tissue mechanics.

**Requisites:** (BME/ME 615 or EMA 622) and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**B M E 740 – BIOMANUFACTURING ENTREPRENEURSHIP**

3 credits.

Industry-relevant concepts of biotechnology innovation and translation, directly connecting lessons and classwork to real-world experience and career opportunities and promoting meaningful and sustained engagement between students and industry representatives. Diverse range of translational biotechnology principles, such as product development in biotechnology, regulating biotechnology products, and quality and compliance in biomanufactured products.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M E/CHEM/MED PHYS 750 – BIOLOGICAL OPTICAL MICROSCOPY**

3 credits.

Covers several aspects of state-of-the-art biological and biophysical imaging with an emphasis on instrumentation, beginning with an overview of geometrical optics and optical and fluorescence microscopy. The bulk of the course will focus on advanced imaging techniques including nonlinear optical processes (multi-photon excitation, second harmonic generation, and stimulated Raman processes) and emerging super-resolution methods. Special emphasis will be given to current imaging literature and experimental design. Knowledge of physics-based optics [such as PHYSICS 202] strongly recommended.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**B M E 751 – BIOMEDICAL OPTICS AND BIOPHOTONICS**

3 credits.

The study and use of light in the life sciences. Interactions of light with cells and tissue can be used for imaging, measurement, diagnosis, and therapy. Applications include optical imaging, endoscopy, microscopy, resolution enhancement, adaptive optics, Optical Coherence Tomography (OCT), quantitative phase microscopy, spectroscopy (fluorescence, elastic scattering), diffuse optical tomography, and computational modeling of light transport in tissue. Fundamental skills, concepts, and theory used for these applications include geometric optics, lens design, Fourier transforms, polarization, interference, coherence, and scattering theory. Particular emphasis will be placed on current literature and cutting edge instruments and methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021



**B M E/E C E/MED PHYS 778 – MACHINE LEARNING IN ULTRASOUND IMAGING**

3 credits.

Concepts and machine learning techniques for ultrasound beamforming for image formation and reconstruction to image analysis and interpretation will be presented. Key machine learning and deep learning concepts applied to beamforming, compressed sampling, speckle reduction, segmentation, photoacoustics, and elasticity imaging will be evaluated utilizing current peer-reviewed publications.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M E 780 – METHODS IN QUANTITATIVE BIOLOGY**

1 credit.

Focuses on understanding the key methods and principles of quantitative biology through a close reading of the primary literature. Topics covered will include deterministic and stochastic methods for modeling cellular systems, techniques in systems and synthetic biology, image processing tools and image analysis for biology, data-driven network models, genomic approaches, single-molecule approaches, and key computational biology tools. This course is intended for graduate students from a variety of backgrounds who are interested in pursuing quantitative biology during their graduate studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M E/CBE 782 – MODELING BIOLOGICAL SYSTEMS**

3 credits.

Literature survey of mathematical models in biology at the molecular and cellular levels; application of chemical kinetics and thermodynamics to biological systems; comparison of deterministic and stochastic strategies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**B M E/CBE 783 – DESIGN OF BIOLOGICAL MOLECULES**

3 credits.

Introduction to the methodologies for engineering the structure and function of biological molecules, especially proteins. Develop an understanding for the integration of computation and experiment to address biological molecular engineering problems. Knowledge of biochemistry and cell biology [such as BIOCHEM 501 or ZOOLOGY 570] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**B M E 790 – MASTER'S RESEARCH AND THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M E 799 – ADVANCED INDEPENDENT STUDY**

1-5 credits.

Under faculty supervision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M E 890 – PRE-DISSERTATION RESEARCH**

1-9 credits.

Under faculty supervision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M E/B M I/BIOCHEM/CBE/COMP SCI/GENETICS 915 – COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**

1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M E 990 – RESEARCH AND THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M E 999 – ADVANCED INDEPENDENT STUDY**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Biomedical Engineering PhD or professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019



# BIOMOLECULAR CHEMISTRY (BMOLCHEM)

## **BMOLCHEM/B M I/BIOCHEM/MATH 609 – MATHEMATICAL METHODS FOR SYSTEMS BIOLOGY**

3 credits.

Provides a rigorous foundation for mathematical modeling of biological systems. Mathematical techniques include dynamical systems and differential equations. Applications to biological pathways, including understanding of bistability within chemical reaction systems, are emphasized.

**Requisites:** MATH 415 and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## **BMOLCHEM/MICROBIO 668 – MICROBIOLOGY AT ATOMIC RESOLUTION**

3 credits.

Three-dimensional protein structures form the basis for discussions of high resolution microbiology; how particular problems are solved with given protein architectures and chemistries and how themes of protein structure are modified and recycled.

**Requisites:** (BIOCHEM 501 or 507) and (MICROBIO 470 or 612) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## **BMOLCHEM 675 – ADVANCED OR SPECIAL TOPICS IN BIOMOLECULAR CHEMISTRY**

1-3 credits.

Examines special topics in biomolecular chemistry. Topics and content will vary each semester and by section of the course.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## **BMOLCHEM 699 – SPECIAL RESEARCH PROBLEMS**

1-5 credits.

Self-directed work under the supervision and guidance of an Instructor and often in conjunction with a day-to-day mentor that is a graduate student or postdoc researcher in the instructor's group. Students normally participate in aspects of ongoing research projects.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **BMOLCHEM/BIOCHEM 701 – PROFESSIONAL RESPONSIBILITY**

1 credit.

Training for the practical aspects of being a scientist. Will cover ethics, peer review, grant writing, science communication, career alternatives, paper writing, experimental design, research documentation, science funding, academic-private interface, scientific fraud, and more.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## **BMOLCHEM 720 – EXPERIMENTAL DESIGN AND PARADIGMS IN CELLULAR BIOCHEMISTRY AND MOLECULAR BIOLOGY**

3 credits.

Covers following areas from historical to modern contexts: biochemistry of post-translational modification of proteins, model organisms, transcriptional switches, chromosome replication, and RNA in biological regulation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## **BMOLCHEM 901 – BIOMOLECULAR CHEMISTRY SEMINAR**

1 credit.

Critical review of selected topics in biomolecular chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## **BMOLCHEM/BIOCHEM 913 – SEMINAR-RIBOGROUP (ADVANCED)**

1 credit.

Student-led discussions of RNA-related problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BMOLCHEM/BIOCHEM/M M & I 914 – SEMINAR-MOLECULAR BIOSCIENCES (ADVANCED)**

1 credit.

During the fall semester, molecular biosciences trainees who have not achieved dissertator status will present seminars based primarily on literature related to their projects. During the spring semester, molecular biosciences trainees with dissertator status will present seminars based upon their own research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**BMOLCHEM 990 – ADVANCED BIOMOLECULAR CHEMISTRY AND RESEARCH**

1-12 credits.

Research supervised by individual faculty members.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## BIOSTATISTICS AND MEDICAL INFORMATICS (B M I)

**B M I/POP HLTH 451 – INTRODUCTION TO SAS PROGRAMMING FOR POPULATION HEALTH**

2 credits.

Use of the SAS programming language for the management and analysis of biomedical data.

**Requisites:** Declared in the Population Health, Epidemiology or Clinical Investigation graduate program.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/STAT 541 – INTRODUCTION TO BIostatistics**

3 credits.

Course designed for the biomedical researcher. Topics include: descriptive statistics, hypothesis testing, estimation, confidence intervals, t-tests, chi-squared tests, analysis of variance, linear regression, correlation, nonparametric tests, survival analysis and odds ratio. Biomedical applications used for each topic.

**Requisites:** Graduate/professional standing. Not open to students with credit for B M I/STAT 511 or B M I/POP HLTH/B M I 551

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/STAT 542 – INTRODUCTION TO CLINICAL TRIALS I**

3 credits.

Intended for biomedical researchers interested in the design and analysis of clinical trials. Topics include definition of hypotheses, measures of effectiveness, sample size, randomization, data collection and monitoring, and issues in statistical analysis. Statistics graduate students should take B M I/STAT 641.

**Requisites:** STAT/B M I/STAT 541

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M I 544 – INTRODUCTION TO CLINICAL AND HEALTHCARE RESEARCH II**

3 credits.

Practical training and skills required in clinical and healthcare research; design, implementation, and conduct of clinical trials and health services research studies; protocol and informed consent development using protocol templates; regulatory requirements; human subjects research protections considerations; data and safety monitoring plans; data collection strategies and data management; strategies to recruit/retain diverse and equitable study participants; research study agreements; budget development and justification; federal, institutional, and sponsor-defined requirements; establishment of research infrastructures for participant safety and study success; preparation of investigator-INDs/ IDEs; and investigator responsibilities.

**Requisites:** B M I/STAT/B M I 542

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/POP HLTH 551 – INTRODUCTION TO BIostatistics FOR POPULATION HEALTH**

3 credits.

Designed for population health researcher. Topics include descriptive statistics, elementary probability, probability distributions, one- and two-sample normal inference (point estimation, hypothesis testing, confidence intervals), power and sample size calculations, one- and two-sample binomial inference, underlying assumptions and diagnostic work.

**Requisites:** Declared in the Population Health, Epidemiology or Clinical Investigation graduate program. Not open to students with credit for B M I/STAT/B M I 541

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/POP HLTH 552 – REGRESSION METHODS FOR POPULATION HEALTH**

3 credits.

Introduction to the primary statistical tools used in epidemiology and health services research; multiple linear regression, logistic regression and survival analysis.

**Requisites:** B M I/STAT/B M I 541 or B M I/POP HLTH/B M I 551

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M I/COMP SCI 567 – MEDICAL IMAGE ANALYSIS**

3 credits.

Present introductory medical image processing and analysis techniques. Topics include medical imaging formats, segmentation, registration, image quantification, classification. Strongly encourage Matlab experience, such as COMP SCI 310 or 368-Matlab.

**Requisites:** (MATH 320 or 340) and (B M I/STAT 511, 541, B M I/POP HLTH/B M I 551, STAT 324, 371, or FW ECOL/HORT/STAT/F&W ECOL/HORT 571) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I 573 – FOUNDATIONS OF DATA-DRIVEN HEALTHCARE**

3 credits.

Familiarize students with basic informatics principles and techniques to support clinical research and quality improvement studies from a perspective of data-driven approaches. Content includes information systems for study design; regulatory compliance; use of electronic health records data for research; data collection and acquisition; data security, storage, transfer, processing and analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M I/COMP SCI 576 – INTRODUCTION TO BIOINFORMATICS**

3 credits.

Algorithms for computational problems in molecular biology. Studies algorithms for problems such as: genome sequencing and mapping, pairwise and multiple sequence alignment, modeling sequence classes and features, phylogenetic tree construction, and gene-expression data analysis.

**Requisites:** (COMP SCI 320 or 400) and MATH 222, graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/BIOCHEM/BMOLCHEM/MATH 609 – MATHEMATICAL METHODS FOR SYSTEMS BIOLOGY**

3 credits.

Provides a rigorous foundation for mathematical modeling of biological systems. Mathematical techniques include dynamical systems and differential equations. Applications to biological pathways, including understanding of bistability within chemical reaction systems, are emphasized.

**Requisites:** MATH 415 and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**B M I/I SY E 617 – HEALTH INFORMATION SYSTEMS**

3 credits.

Provides grounding in core concepts of health information systems. Major applications include clinical information systems, language and standards, decision support, image technology and digital libraries. Evaluation of IE tools and perspectives designed to improve the quality, efficiency and effectiveness of health information.

**Requisites:** I SY E 417, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**B M I/STAT 641 – STATISTICAL METHODS FOR CLINICAL TRIALS**

3 credits.

Statistical issues in the design of clinical trials, basic survival analysis, data collection and sequential monitoring. Intended for statistics graduate students; those with medical backgrounds should take STAT/B M I 542.

**Requisites:** MATH/STAT/MATH 310 or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**B M I/STAT 642 – STATISTICAL METHODS FOR EPIDEMIOLOGY**

3 credits.

Methods for analysis of case-control, cross sectional, and cohort studies. Covers epidemiologic study design, measures of association, rates, classical contingency table methods, and logistic and Poisson regression.

**Requisites:** MATH/STAT/MATH 310 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**B M I/POP HLTH 651 – ADVANCED REGRESSION METHODS FOR POPULATION HEALTH**

3 credits.

Extension of regression analysis to observational data with unequal variance, unequal sampling and propensity weights, clusters and longitudinal measurements, using different variance structures, mixed linear models, generalized linear models and GEE. Matrix notation will be introduced and underlying mathematical and statistical principles will be explained. Examples use data sets from ongoing population health research.

**Requisites:** B M I/POP HLTH/B M I 552**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**B M I/POP HLTH 652 – TOPICS IN BIOSTATISTICS FOR EPIDEMIOLOGY**

1-3 credits.

Each module will adopt an in-depth focus on a biostatistical method of particular relevance to epidemiology such as measurement error, missing data, intermediate variables, complex study designs, meta-analysis, splines, propensity scores, causal inference, spatial statistics and resampling. One or more modules will be offered every spring semester.

**Requisites:** B M I/POP HLTH/B M I 552**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**B M I 699 – INDEPENDENT STUDY**

1-3 credits.

Directed study to pursue knowledge beyond curriculum.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M I/STAT 727 – THEORY AND METHODS OF LONGITUDINAL DATA ANALYSIS**

3 credits.

Theory and methods of fundamental statistical models for the analysis of longitudinal data, including repeated measures analysis of variance, linear mixed models, generalized linear mixed models, and generalized estimating equations. Introduction of how to implement these methods in statistical softwares such as in R and/or SAS, within the context of appropriate statistical models and carry out and interpret analyses.

**Requisites:** STAT 610**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**B M I 738 – ETHICS FOR DATA SCIENTISTS**

1 credit.

Designed to educate data scientists, particularly those who work with biomedical data, about ethical and regulatory issues that may arise in the course of their research and professional interactions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**B M I/STAT 741 – SURVIVAL ANALYSIS THEORY AND METHODS**

3 credits.

Theory and practice of analytic methods for censored survival data, including nonparametric and parametric methods, the proportional hazards regression model, and a review of current topics in survival analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**B M I/COMP SCI 767 – COMPUTATIONAL METHODS FOR MEDICAL IMAGE ANALYSIS**

3 credits.

Study of computational techniques that facilitate automated analysis, manipulation, denoising, and improvement of large-scale and high resolution medical images. Design and implementation of methods from computer Vision and Machine Learning to efficiently process such image data to answer biologically and clinically meaningful scientific questions. Students are strongly encouraged to have programming skills and basic proficiency in calculus and linear algebra, such as MATH 340.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**B M I/STAT 768 – STATISTICAL METHODS FOR MEDICAL IMAGE ANALYSIS**

3 credits.

Introduce key statistical methods and concepts for analyzing various medical images. Analyze publicly available and student/instructor supplied imaging data using the most up-to-date methods and tools. Aimed at graduate student and researchers with strong quantitative background.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**B M I/COMP SCI 771 – LEARNING BASED METHODS FOR COMPUTER VISION**

3 credits.

Addresses the problems of representation and reasoning for large amounts of visual data, including images and videos, medical imaging data, and their associated tags or text descriptions. Introduces deep learning in the context of computer vision. Covers topics on visual recognition using deep models, such as image classification, object detection, human pose estimation, action recognition, 3D understanding, and medical image analysis. Emphasizes the design of vision and learning algorithms and models, as well as their practical implementations. Strongly recommended to have knowledge in computer vision or machine learning [such as COMP SCI 540] or medical image analysis [such as B M I / COMP SCI/ B M I 567].

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M I 773 – CLINICAL RESEARCH INFORMATICS**

3 credits.

Course will familiarize students with basic informatics principles and techniques to support clinical research. Content includes information systems for protocol design; regulatory compliance; approaches for patient recruitment; efficient protocol management; data collection and acquisition; data security, storage, transfer, processing and analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**B M I/COMP SCI 775 – COMPUTATIONAL NETWORK BIOLOGY**

3 credits.

Introduces networks as a powerful representation in many real-world domains including biology and biomedicine. Encompasses theory and applications of networks, also referred to as graphs, to study complex systems such as living organisms. Surveys the current literature on computational, graph-theoretic approaches that use network algorithms for biological modeling, analysis, interpretation, and discovery. Enables hands-on experience in network biology by implementing computational projects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M I/COMP SCI 776 – ADVANCED BIOINFORMATICS**

3 credits.

Advanced course covering computational problems in molecular biology. The course will study algorithms for problems such as: modeling sequence classes and features, phylogenetic tree construction, gene-expression data analysis, protein and RNA structure prediction, and whole-genome analysis and comparisons.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**B M I 826 – SPECIAL TOPICS IN BIOSTATISTICS AND BIOMEDICAL INFORMATICS**

1-3 credits.

Covers advanced topics in the areas of biostatistics and biomedical informatics. Includes reading and discussion of original literature and individual student projects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M I/COMP SCI/PSYCH 841 – COMPUTATIONAL COGNITIVE SCIENCE**

3 credits.

Studies the biological and computational basis of intelligence, by combining methods from cognitive science, artificial intelligence, machine learning, computational biology, and cognitive neuroscience. Requires ability to program.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**B M I/STAT 877 – STATISTICAL METHODS FOR MOLECULAR BIOLOGY**

3 credits.

Develop statistical problems in gene mapping, high throughput -omics data analysis, phylogenetics and sequence analysis. Introduce ideas of key methods using published data. Statisticians learn statistical basis for research methodology. Collaboration among students and with biologists is encouraged through projects.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022



**B M I 881 – BIOMEDICAL DATA SCIENCE SCHOLARLY LITERATURE 1**

2 credits.

Critical evaluation of the scholarly literature is a crucial skill for researchers. Through this course, students will develop this valuable skill by focused reading and discussion of a variety of journal articles of present or historical importance from the biomedical sciences literature, including biostatistics, biomedical informatics, and relevant topics in statistics and computer science.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M I 882 – BIOMEDICAL DATA SCIENCE SCHOLARLY LITERATURE 2**

2 credits.

Critical evaluation of the scholarly literature is a crucial skill for researchers. Through this course, students will develop this valuable skill by focused reading and discussion of a variety of journal articles of present or historical importance from the biomedical sciences literature, including biostatistics, biomedical informatics, and relevant topics in statistics and computer science.

**Requisites:** B M I 881**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**B M I 883 – BIOMEDICAL DATA SCIENCE PROFESSIONAL SKILLS 1**

1 credit.

A variety of skills that are important for a successful research career are often left to students to develop on their own. This course attempts to fill many of those gaps, including writing and reviewing papers, securing research funding, giving talks, presenting posters, making a personal website, job opportunities in universities and industry, and teaching.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**B M I 884 – BIOMEDICAL DATA SCIENCE PROFESSIONAL SKILLS 2**

1 credit.

A variety of skills that are important for a successful research career are often left to students to develop on their own. This course attempts to fill many of those gaps, including writing and reviewing papers, securing research funding, giving talks, presenting posters, making a personal website, job opportunities in universities and industry, and teaching.

**Requisites:** B M I 883**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**B M I 899 – PRE-DISSERTATOR RESEARCH**

1-12 credits.

Pre-dissertator Research. Course is open to pre-dissertator students only.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M I 901 – FUNDAMENTALS OF INFORMATICS IN CLINICAL RESEARCH**

2 credits.

Become familiar with basic informatics principles and techniques to support clinical research. Content includes information systems for protocol design; regulatory compliance; approaches for patient recruitment; efficient protocol management; data collection and acquisition; data security, storage, transfer, processing and analysis.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**B M I/B M E/BIOCHEM/CBE/COMP SCI/GENETICS 915 – COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**

1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M I/MEDICINE 918 – HEALTH INFORMATICS FOR MEDICAL STUDENTS ELECTIVE**

2 credits.

Biomedical Informatics is an interdisciplinary field that combines knowledge of information sciences and medical sciences to optimize the use and application of biomedical data across the spectrum from molecules to individuals to populations. Offers an overview of the field of health informatics by providing students with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**B M I 990 – DISSERTATOR RESEARCH**

1-3 credits.

Dissertator Research. Course is open to dissertators only.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



# BOTANY (BOTANY)

## BOTANY 100 – SURVEY OF BOTANY

3 credits.

Major emphasis on the roles of plants and microbes in past and present global ecology, and the past and present uses of plants and microbes by humans, including emerging applications of biotechnology.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BOTANY/PL PATH 123 – PLANTS, PARASITES, AND PEOPLE

3 credits.

Explores the interaction between society and plant-associated microbes. Topics include: the Irish potato famine, pesticides in current agriculture, role of economics and consumer preference in crop disease management and the release of genetically engineered organisms.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BOTANY/BIOLOGY 130 – GENERAL BOTANY

5 credits.

Introduction to the basic principles and concepts of the biology of plants. an integrative approach stressing evolutionary sequences and the relationship between structure and function at succeeding levels of organization: molecule, cell, organism, population, community. Correlated lectures, laboratories, and discussions.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BOTANY/BIOLOGY/ZOOLOGY 151 – INTRODUCTORY BIOLOGY

5 credits.

Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/ZOOLOGY 101, 102 or BOTANY/BIOLOGY/BOTANY 130

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BOTANY/BIOLOGY/ZOOLOGY 152 – INTRODUCTORY BIOLOGY

5 credits.

Topics include: selected topics in plant physiology, a survey of the five major kingdoms of organisms, speciation and evolutionary theory, and ecology at multiple levels of the biological hierarchy.

**Requisites:** BOTANY/BIOLOGY/ZOOLOGY/BIOLOGY/BOTANY 151

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## BOTANY 211 – UNDERSTANDING CHANGED LANDSCAPES: WISCONSIN

3 credits.

Exposure to the changing uses of Wisconsin landscapes: as the home of native peoples; as a source of fur, lead and timber; as part of the new nation of the United States; and as a modern, vibrant collection of communities focused on enterprises as diverse as agriculture and education. Asks what roles science has played in shaping the landscape and in current land use. Covers genetically modified crops, the endangered species act, water use, global change.

**Requisites:** Sophomore standing and declared in an Honors program

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## BOTANY 240 – PLANTS AND HUMANS

3 credits.

Plant parts and demonstrations of their utility to humans, origins of domesticated plants, modifications of plants by humans, ecosystem services owed to plants, and reasons to sustain plant diversity.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/F&W ECOL 250 – FORESTS AND HUMANS: FROM THE MIDWEST TO MADAGASCAR**

2 credits.

Provides an overview of the geography, ecology, and economic importance of the world's forest biomes. Learn how climate influences vegetation and, in-turn, how forests impact global climate. Meet scientists working to understand the astounding biodiversity and ecological complexity of forest ecosystems, and how these ecosystems support human life. Discuss the threats to forest ecosystems around the world, and hear from the people trying to protect them. Emphasizes the forest resources and services upon which humans depend, and how we can maintain these resources into the future. Analyze the idea of "sustainability" when it comes to forest management, hear alternative viewpoints about what this word means, and discuss potential trade-offs and conflicts. Look at the many real-world programs in place at the global, national, and local level to sustainably manage forests.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2020**BOTANY/ENVIR ST/ZOOLOGY 260 – INTRODUCTORY ECOLOGY**

3 credits.

The relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BOTANY 265 – RAINFORESTS AND CORAL REEFS**

3 credits.

Are you awed by the amazing biodiversity found in rainforests and coral reefs? See these ecosystems first hand and decide if a career in tropical biology or international conservation is for you. Focuses on the ecology of the world's most biodiverse ecosystems, and their global importance. Learn the physical, chemical, and biological processes that make rainforests and coral reefs function, and the history of human dependence upon these ecosystems. Understand why both of these ecosystems currently are threatened and what actions can and must be taken to protect them.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**BOTANY 299 – DIRECTED STUDY IN BOTANY**

1-3 credits.

Introduces students to research questions and facilitates learning in the field of botany by providing guidance and mentorship in a research environment.

**Requisites:** Consent of instructor**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 300 – PLANT ANATOMY**

4 credits.

Plant structure and development of seed plants, primarily of flowering plants. Emphasis is placed on structure in relation to function and on the plant body as a structural and functional entity.

**Requisites:** Sophomore standing and (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, or BIOCORE 381) or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**BOTANY 305 – PLANT MORPHOLOGY AND EVOLUTION**

4 credits.

A broad survey of the diversity of plants in the context of their evolutionary history. Similarities and differences in structure and reproduction among extant bryophytes, lycopods, ferns, gymnosperms, and flowering plants are emphasized along with the study of fossils representing extinct plant lineages.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**BOTANY 330 – ALGAE**

3 credits.

Introduction to ecology, evolution, systematics, taxonomy, physiology, biochemistry, cell biology, and molecular biology of freshwater, terrestrial and marine algae. Emphasis on techniques for identification, culture, analysis of growth and reproduction, and community composition assessment.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/PL PATH 332 – FUNGI**

4 credits.

Growth, development, variability and dispersal of saprophytic, parasitic, and symbiotic fungi, with a consideration of their ecological and economic significance. Develop skills in microscopy with live fungal materials.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/PL PATH 333 – BIOLOGY OF THE FUNGI**

2 credits.

Growth, development, variability and dispersal of saprophytic, parasitic, and symbiotic fungi, with a consideration of their ecological and economic significance.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/AN SCI/MICROBIO 335 – THE MICROBIOME OF PLANTS, ANIMALS, AND HUMANS**

3 credits.

Examination of the structure and function of microbial communities that live inside and on host organisms (plants, animals, and humans). Introduction to general concepts of the microbiome and microbiota, and their relationship to host nutrition, health, and disease.

**Requisites:** MICROBIO 101 or 303 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/GEOG 338 – ENVIRONMENTAL BIOGEOGRAPHY**

3 credits.

Explores how physical and biological factors affect the distribution of terrestrial biomes, ecosystem types, and biodiversity, as well as the role of disturbance and recent human activities on differences in past and modern day species distributions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/AGRONOMY/HORT 339 – PLANT BIOTECHNOLOGY: PRINCIPLES AND TECHNIQUES I**

4 credits.

Theoretical and practical training in plant biotechnology including molecular biology, protein biochemistry and basic bioinformatic techniques used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOLOGY/ZOOLOGY/BIOLOGY 102) and (CHEM 104, 109, or 116) or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**BOTANY/AGRONOMY/HORT 340 – PLANT CELL CULTURE AND GENETIC ENGINEERING**

3 credits.

Presents an overview of the techniques, biology and underlying theory of plant tissue culture, genetic engineering and genome editing. Overviews of research and commercial applications, and issues/challenges in the area of plant biotechnology are also covered.

**Requisites:** (BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 102, or BIOCORE 381) and (CHEM 104, 109, or 116), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/AGRONOMY/SOIL SCI 370 – GRASSLAND ECOLOGY**

3 credits.

Understand factors driving global, continental, regional, and local distribution of grasslands. Discuss how management affects provision of grassland ecosystem goods and services. Compare and contrast plant community and ecosystem dynamics in native prairie and intensively managed pastures.

**Requisites:** BOTANY/PL PATH/BOTANY 123, BIOLOGY/BOTANY/BIOLOGY 130, ENVIR ST/SOIL SCI/ENVIR ST 101, ATM OCN/SOILSCI 132, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONOMY 100, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY 400 – PLANT SYSTEMATICS**

4 credits.

Plant systematics: the integration of taxonomy (identification, nomenclature, classification emphasizing flowering plants), evolution (speciation, reproductive biology, adaptation, convergence, biogeography), and phylogenetics. Emphasis on representative families and genera of flowering plants in Wisconsin, use of keys, manuals, and iNaturalist, plant collection.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY 401 – VASCULAR FLORA OF WISCONSIN**

4 credits.

Taxonomic survey of the vascular plants of Wisconsin. Emphasis on in forest identification.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/F&W ECOL 402 – DENDROLOGY**

2 credits.

Identification, ranges, uses, and some ecological characteristics of evergreen and deciduous woody plants, both native and cultivated; lab and field work.

**Requisites:** Sophomore standing; not open to special students

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY 403 – FIELD COLLECTIONS AND IDENTIFICATION**

1-4 credits.

An independent experience in collecting plant specimens, identifying the specimens to species, making labels, and mounting of some specimens.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/ANTHRO/ZOOLOGY 410 – EVOLUTIONARY BIOLOGY**

3 credits.

Evolutionary biology, emphasizing how modern scientists study evolution. Topics include: nature and mechanisms of microevolution, macroevolution, adaptation, speciation; systematics and taxonomy; quantitative genetics and measurement of natural selection; phylogenetic analyses of behavior, physiology, morphology, biochemistry; current controversies in evolution.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY/BOTANY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, (ANTHRO 105 and satisfied QR-A requirement), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 422 – PLANT GEOGRAPHY**

3 credits.

Biogeography of plants. Relationship to climate and geology; paleobiogeography, historical biogeography and island biogeography; history and distribution of floras of North America and Wisconsin.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, GEOG/ENVIR ST/GEOG 120, 127, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**BOTANY/ZOOLOGY 450 – MIDWESTERN ECOLOGICAL ISSUES: A CASE STUDY APPROACH**

2 credits.

How ecological principles can be used to address contemporary environmental issues such as water quality, invasive species, and population growth. Emphasis on midwestern issues, practical approaches, the role of history, and geographic context.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and BIOLOGY/ZOOLOGY/BIOLOGY 102), or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**BOTANY/F&W ECOL 455 – THE VEGETATION OF WISCONSIN**

4 credits.

Ecology of Wisconsin plant communities: floristic composition, community structure; relationship to history, climate, soil, and geology; response to human perturbation.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/F&W ECOL/ZOOLOGY 460 – GENERAL ECOLOGY**

4 credits.

Ecology of individual organisms, populations, communities, ecosystems, landscapes, and the biosphere. The interaction of organisms with each other and their physical environment. These relationships are studied, often in quantitative terms, in both field and laboratory settings.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOCORE 381, or BIOLOGY/BOTANY/BIOLOGY 130, or graduate/professional standing

**Course Designation:** Gen Ed – Quantitative Reasoning Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/ENTOM/ZOOLOGY 473 – PLANT-INSECT INTERACTIONS**

3 credits.

Multiple ways in which arthropods exploit plants, plant traits that deter or augment insects, environmental mediation of these interactions, effects on population dynamics, community ecology and co-evolution, and implications to natural resource management, environmental quality, and sustainable development.

**Requisites:** ZOOLOGY/BOTANY/F&W ECOL/BOTANY/ZOOLOGY 460, ENTOM/F&W ECOL/ENTOM 500, PL PATH/BOTANY/ENTOM/BOTANY/PL PATH 505, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**BOTANY/AMER IND/ANTHRO 474 – ETHNOBOTANY**

3-4 credits.

Study of the interactions between human cultures and plants. Topics include: traditional resource management and agriculture; crop domestication, evolution, and conservation; archaeobotany; indigenous knowledge; folk taxonomy; plants in symbolism and religion; dietary patterns; phytochemistry; global movement of plants and peoples.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Biological Science or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BOTANY 499 – INTERMEDIATE DIRECTED RESEARCH**

1-3 credits.

Explore research questions that facilitate learning in the field of botany through guidance and mentorship in a research environment.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 500 – PLANT PHYSIOLOGY**

3-4 credits.

An in-depth look at plant growth, development, respiration, photosynthesis, mineral nutrition, and water relations. Experimental approaches will be used to demonstrate principles described.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement, sophomore standing, and (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, or BIOCORE 381), or graduate/professional standing**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BOTANY/ENTOM/PL PATH 505 – PLANT-MICROBE INTERACTIONS: MOLECULAR AND ECOLOGICAL ASPECTS**

3 credits.

Molecular and ecological aspects of the interactions between plants and microorganisms. Explores many of the themes, from genetic to integrative, of modern biology, and illustrates how study of plant-microbe interactions contributes to understanding of fundamental plant science.

**Requisites:** MICROBIO 303, GENETICS 466, 468, BIOCHEM 501, 508, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BOTANY/PL PATH 563 – PHYLOGENETIC ANALYSIS OF MOLECULAR DATA**

3 credits.

Theory and practice of phylogenetic inference from DNA sequence data.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**BOTANY 575 – SPECIAL TOPICS**

1-3 credits.

Topics of interest focusing on specific subjects or groups of organisms of plants, algae, or fungi.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101, 102 and BOTANY/BIOLOGY/BOTANY 130), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY/BIOCHEM 621 – PLANT BIOCHEMISTRY**

3 credits.

Biochemistry of photosynthesis, respiration, cell walls, and other metabolic and biosynthetic processes in plants.

**Requisites:** BIOCHEM 501, 507, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021



**BOTANY/HORT/SOIL SCI 626 – MINERAL NUTRITION OF PLANTS**

3 credits.

Essential and beneficial elements, solutions and soil as nutrient sources, rhizosphere chemistry, nutritional physiology, ion uptake and translocation, functions of elements, nutrient interactions, genetics of plant nutrition.

**Requisites:** BOTANY 500 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**BOTANY/ENVIR ST/F&W ECOL/ZOOLOGY 651 – CONSERVATION BIOLOGY**

3 credits.

Application of ecological principles and human dimensions to the conservation of biological diversity. Topics: biodiversity science; conservation planning; population ecology; habitat loss, species exploitation, invasive species, pollution; human attitudes and activities as they affect the biosphere; approaches to monitoring interventions.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BOTANY/ZOOLOGY/BOTANY 450, BOTANY/F&W ECOL/BOTANY 455, BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/GENETICS/M M & I/PL PATH 655 – BIOLOGY AND GENETICS OF FUNGI**

3 credits.

Fungal genetics, genomics, and physiology using plant pathogenic fungi and the genetic models *Aspergillus nidulans* and *Neurospora crassa* as model systems to explore the current knowledge of fungal genetics and plant/fungal interactions.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/LAND ARC 670 – ADAPTIVE RESTORATION LAB**

2 credits.

Field experience in restoration as an adaptive process involving field experimentation; baseline data collection on restoration sites; design of experiments to advance restoration science; quantitative evaluation of restoration outcomes. Includes analysis and interpretation of data.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**BOTANY/F&W ECOL/ZOOLOGY 672 – HISTORICAL ECOLOGY**

2 credits.

Study the importance of past events for current ecosystems. Emphasizes concepts and applications.

**Requisites:** Senior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**BOTANY 681 – SENIOR HONORS THESIS**

3 credits.

Individual research for students completing theses for honors in the Botany major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY 682 – SENIOR HONORS THESIS**

3 credits.

Individual research for students completing theses for honors in the Botany major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 691 – SENIOR THESIS**

2-3 credits.

Individual research for students completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 692 – SENIOR THESIS**

2-3 credits.

Individual research for students completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 698 – DIRECTED STUDY**

1-4 credits.

Advanced directed research projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**BOTANY 699 – DIRECTED STUDY**

1-4 credits.

Explore research questions that facilitate learning in the field of botany through guidance and mentorship in a research environment.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BOTANY/ZOOLOGY 725 – ECOSYSTEM CONCEPTS**

3 credits.

Scope and objectives of ecosystem ecology; roles of theory, long-term studies, comparative studies, and large-scale experiments; scaling problems; ecosystem services and ecological economics; adaptive ecosystem assessment and management.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 801 – ADVANCED PLANT COMMUNITY ECOLOGY**

4 credits.

Ecological determinants of plant community structure, dynamics, and diversity from an evolutionary perspective. Relations of vegetation types, physiognomy and phenology to plant adaptation and constraints. Gradient analysis, succession, nutrient cycling, plant-herbivore interactions, species richness.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY 802 – PHYSIOLOGICAL PLANT ECOLOGY**

3 credits.

Gas exchange at the individual plant and community level, energy balance and water relations, nutrient cycling, biomechanical adaptations; growth analysis; adaptations to sun and shade, primary productivity models, physiological ecology of selected plant communities (arctic/alpine, boreal, chaparral, desert, tropical, aquatic).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**BOTANY/ENTOM/GENETICS/ZOOLOGY 820 – FOUNDATIONS OF EVOLUTION**

2 credits.

Explore some of the most important themes and debates that have permeated evolutionary biology over the last 50 years. Read key papers related to each controversial topic, debate the pros and cons of competing viewpoints, and reflect on the relevance of the issue to contemporary evolutionary biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY/BIOCHEM/GENETICS 840 – REGULATORY MECHANISMS IN PLANT DEVELOPMENT**

3 credits.

Molecular mechanisms whereby endogenous and environmental regulatory factors control development; emphasis on stimulus perception and primary events in the signal chain leading to modulated gene expression and cellular development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**BOTANY 858 – SPECIAL TOPICS IN PLANT PHYSIOLOGY**

1-3 credits.

Topics of interest in the area of Plant Physiology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**BOTANY 860 – PLANT CELL BIOLOGY**

2 credits.

Structure/function relationships at the cellular level. Topics include the biogenesis of organelles, vesicle traffic, ion transport and signalling processes, and organization of the cytoskeleton and cell wall.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**BOTANY/F&W ECOL/ZOOLOGY 879 – ADVANCED LANDSCAPE ECOLOGY**

3 credits.

Emphasizes spatial patterning (its development and importance for ecological processes) and often focuses on large regions. Learn concepts, methods, and applications of landscape ecology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**BOTANY/ATM OCN/CIV ENGR/ENVIR ST/GEOSCI/ZOOLOGY 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BOTANY 920 – SEMINAR IN ALGOLOGY: FRESH WATER ALGAE**

1 credit.

Topics, recent advances literature in the area of Algology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**BOTANY/PL PATH 930 – SEMINAR-MYCOLOGY**

1 credit.

Topics, recent advances literature in the area of Mycology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**BOTANY 940 – SEMINAR IN PLANT SYSTEMATICS AND EVOLUTION**

1 credit.

Topics, recent advances literature in the area of Plant Systematics and Evolution.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**BOTANY 941 – PLANT TAXONOMY JOURNAL REVIEW**

1 credit.

Review of recent journal publications in the area of Plant Taxonomy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**BOTANY 950 – SEMINAR-PLANT ECOLOGY**

1 credit.

Topics, recent advances literature in the area of Plant Ecology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**BOTANY 951 – PLANT ECOLOGY JOURNAL REVIEW**

1 credit.

Review of recent journal publications in the area of Plant Ecology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**BOTANY/AGRONOMY/ATM OCN/ENTOM/ENVIR ST/F&W ECOL/ GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**BOTANY 960 – SEMINAR-PLANT PHYSIOLOGY**

1 credit.

Topics, recent advances literature in the area of Plant Physiology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**BOTANY/ATM OCN/ENVIR ST/F&W ECOL/GEOSCI/ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**BOTANY 990 – RESEARCH-PHYCOLOGY**

1-12 credits.

Independent research in the area of Phycology.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**BOTANY 993 – RESEARCH: FUNGAL BIOLOGY**

1-12 credits.

Independent research in the area of Fungal Biology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 994 – RESEARCH-PLANT SYSTEMATICS**

1-12 credits.

Independent research in the area of Plant Systematics.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 995 – RESEARCH-PLANT ECOLOGY**

1-12 credits.

Independent research in the area of Plant Ecology.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 996 – RESEARCH-PLANT PHYSIOLOGY**

1-12 credits.

Independent research in the area of Plant Physiology.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**BOTANY 999 – INDEPENDENT WORK**

1-3 credits.

Mentored reading and research for dissertators.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2011

## CELL AND REGENERATIVE BIOLOGY (CRB)

**CRB/MED HIST 615 – REGENERATIVE MEDICINE ETHICS AND SOCIETY**

3 credits.

Study of regenerative medicine and stem cell research within social, ethical and political contexts.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CRB 625 – STEM CELL SEMINAR**

1 credit.

Examines various special topics in stem cell and regenerative medicine research.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CRB 630 – PROTEOMICS APPROACHES FOR BIOLOGISTS**

2 credits.

Proteomics and metabolomics are playing an increasingly important role in biology and medicine. Many biology labs are now starting to use proteomics and metabolomics in their research projects. Includes the essential fundamentals and applications in mass spectrometry-based proteomics and metabolomics to address biological/medical problems. Design of proteomics/metabolomics experiments, troubleshooting, and proper interpretation of the results.

**Requisites:** BIOCHEM 501, 507, or graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**CRB 640 – FUNDAMENTALS OF STEM CELL AND REGENERATIVE BIOLOGY**

3 credits.

Provides a foundation to understand fundamental biological, mechanistic, and experimental concepts in the field of stem cell and regenerative biology.

**Requisites:** BIOCORE 383, BIOCHEM 501, BIOCHEM 507, GENETICS 466, GENETICS 467, ZOOLOGY 570, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CRB 650 – MOLECULAR AND CELLULAR ORGANOGENESIS**

3 credits.

Covers the most current knowledge of the principles of organogenesis. Focuses on the molecular and cellular pathways leading to normal tissue and organ development and regeneration, including in depth discussions of specification and differentiation processes.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 383) and junior standing, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB/B M E 670 – BIOLOGY OF HEART DISEASE AND REGENERATION**

3 credits.

Presents diverse topics in contemporary heart biology to facilitate understanding of biological, mechanistic, and experimental concepts of cardiac physiology, disease, and regeneration. Learn cellular and molecular mechanisms underlying heart physiology, function, disease and regenerative ability in various model systems. Includes thinking critically about methodology, experimental design and interpretation, and how conclusions are reached in heart biology through cutting-edge literature.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 and BIOCHEM 501) or graduate/professional standing.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 675 – TOPICS IN CELL AND REGENERATIVE BIOLOGY**

1-3 credits.

Examines various special topics in Cell and Regenerative Biology.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or BIOLOGY/BOTANY/BIOLOGY 130 or (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 and 152) or BIOCORE 383; or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**CRB 699 – INDEPENDENT STUDY**

1-4 credits.

One-on-one learning experience allowing undergraduates to work with a faculty adviser to develop research projects and skills.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CRB/MEDICINE 701 – CELL SIGNALING AND HUMAN DISEASE**

1 credit.

Landmark discoveries, as well as current knowledge and controversies in human health, with an emphasis on cancer biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB/GENETICS 710 – DEVELOPMENTAL GENETICS**

3 credits.

Covers a broad range of topics in animal development, with an emphasis on molecular mechanisms. Focuses on common themes, with the goal of understanding and analyzing current research in developmental biology and genetics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 800 – INTELLECTUAL PROPERTY, PATENTS AND LICENSING**

2 credits.

Presents important core concepts, including intellectual property, patent law, trademarks, copyrights, trade secrets, licensing and patent litigation, all specific to the field of biotechnology. Covers the types of intellectual property and how they fit together to protect a product or service. Covers the fundamentals of licensing and technology transfer and the important role of patent examines. Explores the unique aspects of early-stage intellectual property, including market dynamics, pricing and valuation.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 802 – BUSINESS OF BIOTECHNOLOGY: FUNDAMENTALS OF PRODUCT DEVELOPMENT**

2 credits.

Exposure to business principles as applied to the operation of biotechnology companies and serve as a foundation for the more advanced business curriculum. Lays the groundwork to fully appreciate the challenges inherent in translating scientific discoveries into a successful business.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**CRB 803 – MOLECULAR TECHNOLOGIES I**

2 credits.

An intensive workshop that will teach biotechniques, biotechnology product development, and biotechnology applications interfaced with analytical, communication and teaching skills. Simulates the corporate and academic biotechnology setting.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 804 – BIOTECHNOLOGY REGULATION AND ETHICS**

2 credits.

An introductory survey course of the political, legal, and ethical issues that have driven the development of the biotechnology industry. Special emphasis is given to FDA regulation of new drugs, devices, and biologics, and to federal regulation and ethics of human subjects research. Come away with an enhanced ability to understand how regulation and politics interact with business and finance to influence the formation and growth of biotechnology companies. Introduction to the ethical issues that help shape public policy regarding applications of biotechnology.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 810 – MOUSE GENETICS AND EMBRYONIC STEM CELLS: LAB IMMERSION AND UNDERSTANDING CURRENT LITERATURE**

2 credits.

Clinically relevant methods of scientific thought, inquiry and analysis via the presentation of specific research topics. Emerging concepts in developmental genetics and embryonic stem (ES) cell biology are used as a means of introducing the participants to the critical importance of identifying the "right" question, selecting the "best" tools to answer the question, using the appropriate logic to interpret experimental results and finally, constructing appropriate conclusions. Application of the literature of mouse genetics and laboratory research to biomedical health decisions. Strong emphasis on the tools used in the research literature and to 'get your hands dirty' learning the basics of the laboratory techniques involved.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CRB 820 – BIOTECHNOLOGY OPERATIONS**

5 credits.

Addresses issues related to the development and manufacture of products for human health, including medical devices and human therapeutics. Topics include regulatory affairs, quality control and validation, clinical and nonclinical studies.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 824 – MOLECULAR TECHNOLOGIES II**

3 credits.

An intensive workshop that will teach biotechniques, biotechnology product development, and biotechnology applications interfaced with analytical, communication and teaching skills. Simulates the corporate and academic biotechnology setting.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 830 – EARLY DRUG DISCOVERY**

4 credits.

Provides an overview of the early drug discovery process, including target identification and validation, generation of diverse chemical libraries, assay development and high throughput screening, lead optimization by compound profiling, and drug targeting and delivery.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 834 – MOLECULAR TECHNOLOGIES III**

2 credits.

Covers topics and concepts in the drug discovery process, with emphasis on laboratory assays and methods used in primary, secondary, and in vitro ADMETox (Absorption, Distribution, Metabolism, Excretion, Toxicity) drug screening. In addition, students build communication and critical thinking skills while working on team projects and analyzing scientific results.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CRB 841 – BUSINESS OF BIOTECHNOLOGY: CONTEMPORARY CHALLENGES AND APPLICATIONS**

2 credits.

Presents contemporary issues in the business of biotechnology where students apply concepts critical to the success of modern biotechnology firms. Topics focus on modern problem-solving, including issues relating to leadership and management, product development and negotiation and licensing.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**CRB 842 – BUSINESS OF BIOTECHNOLOGY: SUSTAINING GROWTH**

3 credits.

Examine how companies gain and sustain competitive advantages.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 843 – PROJECT MANAGEMENT AND LEADERSHIP**

2 credits.

With a focus on the biotechnology and medical device industries, provides an opportunity to share experiences and information and to practice leadership and project management knowledge and skills. Focuses upon understanding and developing a Project Management Plan. Addresses the issues and various situations faced by Project Managers and their effective response.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 844 – ADVANCED BIOTECHNOLOGY: GLOBAL PERSPECTIVES**

3 credits.

Focuses on state-of-the-art topics of global importance in biotechnology. Skills and knowledge from previous courses are integrated and applied to achieve a new level of synthesis and depth of understanding about important programs in biotechnology today. Deepen technical understanding of novel technologies and broaden awareness of ethical and regulatory issues in biotechnology globally. Increase awareness of opportunities for intellectual collaboration and entrepreneurship.

**Requisites:** Declared in the Biotechnology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 845 – PROFESSIONAL DEVELOPMENT AND EFFECTIVE MANAGEMENT**

1 credit.

Focus on effective management and career development. Learn and practice the applied skills needed for effective managers that lead to synergistic team success within a biotechnology company. Different communication styles will be explored that are used to engage and assess employees. Professional development will be explored to expand career pathways through networking and by generating professional resumes and interviewing skills.

**Requisites:** Declared in Biotechnology MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 846 – BIOTECHNOLOGY CAPSTONE**

1 credit.

Goal is to identify a global biotechnology problem, find a technical solution, and analyze all aspects from a business, regulatory, and scientific perspective.

**Requisites:** Declared in Biotechnology MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CRB 850 – FUNDAMENTALS OF STEM CELL AND REGENERATIVE BIOLOGY**

1 credit.

Gain in-depth knowledge of the fundamentals of stem cell and regenerative biology. This knowledge forms the basis for novel translational research and both diagnostic and therapeutic options. Topics to be covered include the origins of embryonic stem cells (ESCs) and induced pluripotent stem cells (iPSCs) and how they are being used for both research and for clinical applications. Read, discuss, and present cutting-edge literature on how iPSCs are being used to model a variety of human diseases and how stem cell therapies are being used to treat autoimmune disorders such as Lupus Erythematosus, Multiple Sclerosis, and Crohn's disease. Participate in the Stem Cell and Regenerative Medicine Center weekly seminar, and hear from top UW researchers about how they are using stem cells to develop therapies for bone and vascular repair.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CRB 860 – THE BEAT GOES ON: GENERATION AND REGENERATION OF THE HEART**

2 credits.

The molecular and cellular development of the heart and of its regenerative potential. This knowledge forms the basis for novel translational research and both diagnostic and therapeutic options. Topics to be covered include the genetics underlying normal heart development as well as cardiac tissue specification and differentiation with a focus on molecular signals, associated signal transduction pathways, and transcriptional regulation. Read, discuss, and present cutting-edge literature on the genetic contributions to congenital heart defects and adult heart disease and on cardiac stem cells and the regenerative capacity of the heart. Participate in Adult and Pediatric Cardiology Grand Rounds, the Madison Perinatology Conference, learn about cutting-edge molecular diagnostics for fetal, pediatric and adult cardiac disease, and learn when and how to perform an adult echocardiogram.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CRB 990 – RESEARCH AND THESIS**

1-9 credits.

Research and Thesis.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## CHEMICAL AND BIOLOGICAL ENGINEERING (CBE)

**CBE 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Sophomore standing**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE 150 – INTRODUCTION TO CHEMICAL ENGINEERING**

1 credit.

Overview of the field of chemical engineering, including types of careers, industries, and skills required for successful completion of the degree and entry into the chemical engineering profession.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 250 – PROCESS SYNTHESIS**

3 credits.

An introduction to the invention of processes for the large scale, low cost processing of materials such as water, chemicals, petroleum products, food, drugs and wastes.

**Requisites:** CHEM 116, 329, or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 255 – INTRODUCTION TO CHEMICAL PROCESS MODELING**

3 credits.

Introduction to modeling of chemical processes and introduction to using modern computational tools to analyze the models.

**Requisites:** (CBE 250 or concurrent enrollment) and (MATH 319, 320, 376, or concurrent enrollment)**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 310 – CHEMICAL PROCESS THERMODYNAMICS**

3 credits.

Introduction to thermodynamics, energy balances, applications to steady state and unsteady state processes, behavior of pure fluids, chemical reaction equilibria.

**Requisites:** (MATH 234 or 376), (PHYSICS 201, 207, 247, E M A 202 or M E 240), CBE 250, and (CBE 255 or concurrent enrollment), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 311 – THERMODYNAMICS OF MIXTURES**

3 credits.

Properties of ideal and non-ideal vapors and liquids, ideal and non-ideal multicomponent vapor-liquid and liquid-liquid equilibria, complex chemical reaction equilibria, electrolytic solutions, surface thermodynamics, solid phase thermodynamics.

**Requisites:** CBE 310**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 320 – INTRODUCTORY TRANSPORT PHENOMENA**

4 credits.

Mass, momentum, and energy transport; calculation of transport coefficients; solution to problems in viscous flow, heat conduction, and diffusion; dimensional analysis; mass, momentum, and heat transfer coefficients; over-all balances; elementary applications.

**Requisites:** (PHYSICS 201, 207, 247, or E M A 201) and (MATH 319, 320 or 376), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 324 – TRANSPORT PHENOMENA LAB**

3 credits.

Determination of thermodynamic properties, transport properties, and transfer coefficients; study of related phenomena.

**Requisites:** CBE 310, (CBE 320 or concurrent registration), and STAT 324**Repeatable for Credit:** No**Last Taught:** Spring 2023**CBE 326 – MOMENTUM AND HEAT TRANSFER OPERATIONS**

3 credits.

Analysis of chemical engineering operations involving fluid flow and heat transfer. Flow of fluids through ducts and porous media; motion of particulate matter in fluids; general design and operation of fluid-flow equipment. Conductive, convective and radiative heat exchange with and without phase change; general design and operation of heat-exchange equipment.

**Requisites:** (CBE 310 and 320) or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CBE 361 – BIOMOLECULAR ENGINEERING LABORATORY**

3 credits.

Instruction and laboratory experiments in basic molecular biology techniques, recombinant protein production, fermentation processes, protein purification and characterization, and related bioengineering laboratory topics. Geared towards those with interests in biotechnology and synthetic biology.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, BIOCORE 381, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**CBE 424 – OPERATIONS AND PROCESS LABORATORY**

5 credits.

Experiments in unit operations, and supervised individual assignments selected from areas such as: fluid dynamics, analytical methods, reaction kinetics, plastics technology, and use of computers in data processing and simulation.

**Requisites:** CBE 324, 326, 426, and 430

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CBE 426 – MASS TRANSFER OPERATIONS**

3 credits.

Analysis of chemical engineering operations involving mass transfer. Differential and stagewise separation processes; simultaneous heat and mass transfer; mass transfer accompanied by chemical reaction; general design and operation of mass-transfer equipment.

**Requisites:** CBE 311 and 320

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 430 – CHEMICAL KINETICS AND REACTOR DESIGN**

3 credits.

Analysis and interpretation of kinetic data and catalytic phenomena; application of basic engineering principles to chemical reactor design.

**Requisites:** CBE 311 and 320

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 440 – CHEMICAL ENGINEERING MATERIALS**

3 credits.

Structure and properties of metallic and nonmetallic materials of construction; interrelations between chemical bonding, structure, and behavior of materials.

**Requisites:** CBE 310 and CHEM 345, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 450 – PROCESS DESIGN**

3 credits.

Analysis and design of chemical processing systems and equipment.

**Requisites:** CBE 326, 426, and 430

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 470 – PROCESS DYNAMICS AND CONTROL**

3 credits.

A systematic introduction to dynamic behavior and automatic control of industrial processes; lab includes instrumentation, measurement and control of process variables by using conventional hardware and real-time digital computers.

**Requisites:** CBE 326 and (CBE 430 or concurrent enrollment)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

Declared in Chemical Engineering Honors in Research Program

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CBE/CHEM 505 – ASPECTS OF INDUSTRIAL CHEMISTRY AND BUSINESS FUNDAMENTALS**

3 credits.

Learn the chemistry and chemical engineering that defines societies' standard of living. Commercial chemical processes will be reviewed. Practical realities of how a discovery moves from research to commercial product will be taught through examples and case studies. Financial concepts that guide investment will be reviewed.

**Requisites:** Junior standing and CHEM 345, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CBE 512 – ENERGY TECHNOLOGIES AND SUSTAINABILITY**

3 credits.

Chemical engineering principles of material and energy balances, chemical process design, and chemical engineering economics are used to analyze a wide variety of energy systems and their impact on the economy, the environment, society, and the chemical process industry.

**Requisites:** CBE 310, CIV ENGR 324, M E 361, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE/M E 525 – MACROMOLECULAR HYDRODYNAMICS**

3 credits.

Observed phenomena in polymeric flow systems. Techniques of viscometry and viscoelastic measurements for polymeric fluids. Rheological models. Analytical solutions to flow problems: non-Newtonian viscosity, linear viscoelasticity, normal stresses, recoil, stress relaxation, etc. Dimensional analysis. Unit operations of the polymer industry: extrusion, blow molding, injection molding, mixing.

**Requisites:** M E 363, CBE/B M E 320, member of Engineering Guest Students, or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CBE 535 – HETEROGENEOUS CATALYSIS: PRINCIPLES AND APPLICATIONS**

3 credits.

Discusses catalytic phenomena, with extensions to reactor design and catalyst characterization. Examples will be drawn from current problems in catalysis.

**Requisites:** CBE 430, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CBE 538 – PROCESSES FOR THE PRODUCTION OF RENEWABLE FUELS AND CHEMICALS FROM BIOMASS**

3 credits.

Various options for conversion of biomass into fuels and chemicals. Evaluation of different biofuel technologies from a chemical engineering perspective, and a holistic overview of the current technical, legal, business, and financial challenges, and opportunities for the production of fuels and chemicals from biomass. Several case studies on biomass conversion provide an overview of how technology is developed.

**Requisites:** CBE 250 and 310, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 540 – POLYMER SCIENCE AND TECHNOLOGY**

3 credits.

Synthesis, properties, and fabrication of plastic materials of industrial importance.

**Requisites:** CHEM 345, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 541 – PLASTICS AND HIGH POLYMER LABORATORY**

1-3 credits.

Experiments on polymerization, fabrication, and testing of plastics.

**Requisites:** CHEM 344, 345, and (CBE 540, CHEM 664, or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CBE 547 – INTRODUCTION TO COLLOID AND INTERFACE SCIENCE**

3 credits.

Introduction to topics in colloid and interface science, including sedimentation and diffusion, solution thermodynamics, rheology, light scattering, surface tension and contact angle, adsorption, association colloids, particle interactions, electrokinetics, and colloidal stability.

**Requisites:** (CBE 311, CHEM 561, or 562), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 554 – CHEMICAL ENGINEERING AND THE COMMUNITY**

1 credit.

Connect with a local community through the development and implementation of two research based hands-on inquiry engineering demonstrations for middle school level after-school science programs.

**Requisites:** CBE 250

**Repeatable for Credit:** Yes, unlimited number of completions

**CBE 555 – SEMINAR-CHEMICAL ENGINEERING CONNECTIONS**

1 credit.

Considers a variety of current engineering applications and problems. Investigate background information on topics of their choice, and present seminars to describe how engineering fundamentals interact with societal impact and how chemical engineering is relevant to societal concerns at large.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE/B M E 560 – BIOCHEMICAL ENGINEERING**

3 credits.

Properties of biological molecules; enzyme kinetics, enzyme reactors, and enzyme engineering; metabolic engineering; microbial growth kinetics; bioreactor design; bioseparations.

**Requisites:** Junior standing and (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 383), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 562 – SPECIAL TOPICS IN CHEMICAL ENGINEERING**

1-3 credits.

Topics of specialized interest to majors in chemical engineering. Given on demand.

**Requisites:** Junior standing or member of Engineering Guest Students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CBE/M E 567 – SOLAR ENERGY TECHNOLOGY**

3 credits.

Radiant energy transfer and its application to solar exchangers; energy balances for solar exchangers, review of theory, economics, and practice of solar energy applications.

**Requisites:** (M E 364, CBE 326, or concurrent enrollment), or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CBE 575 – INSTRUMENTAL ANALYSIS FOR CHEMICAL ENGINEERS**

3 credits.

Instrumental methods as applied to chemical and physical processes in chemical engineering. Spectroscopic, optical, and electrochemical methods; chromatography, differential thermal analysis, and microscopy.

**Requisites:** CBE 324 or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**CBE 599 – SPECIAL PROBLEMS**

1-4 credits.

Research or independent study.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CBE 620 – INTERMEDIATE TRANSPORT PHENOMENA**

3 credits.

Mass, momentum, and energy transport; kinetic theory of transport properties; analytical and approximate solutions to the equations of change; boundary layer theory; turbulence; simultaneous heat and mass transfer; multicomponent diffusion.

**Requisites:** Declared in a Chemical Engineering graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 648 – SYNTHETIC ORGANIC MATERIALS IN BIOLOGY AND MEDICINE**

2-3 credits.

Introduction to topics relevant to the design, synthesis, fabrication, engineering, and characterization of organic materials currently used in or being designed for use in medical and biotechnological applications.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CBE 660 – INTERMEDIATE PROBLEMS IN CHEMICAL ENGINEERING**

3 credits.

Illustrations of solving chemical engineering problems by using a variety of mathematical topics such as ordinary and partial differential equations, Laplace transform, Bessel functions, matrices, and tensor analysis.

Problem formulation and interpretation of results emphasized.

**Requisites:** Declared in a Chemical Engineering graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CBE 699 – ADVANCED INDEPENDENT STUDIES**

1-6 credits.

Research on assigned topics under the guidance of a qualified instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**CBE 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**CBE 710 – ADVANCED CHEMICAL ENGINEERING THERMODYNAMICS**

3 credits.

Application of thermodynamic principles to selected topics, including equations of state, non-ideal solutions, and complex physical and chemical equilibria.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CBE 720 – MICROHYDRODYNAMICS, BROWNIAN MOTION, AND COMPLEX FLUIDS**

3 credits.

Foundations for understanding microscale flow and transport phenomena in multiphase and complex fluids, as well as tools for modeling and simulation of their dynamics.

**Requisites:** CBE 620 and 660

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**CBE 731 – COMPUTATIONAL MODELLING OF REACTIVE SYSTEMS**  
3 credits.

Principles of computer-aided modelling of chemical reaction systems. Formulation, numerical solution and sensitivity analysis of reactor models. Bayesian estimation of parameters. Iterative strategies for model development. Structure and use of related software.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CBE 735 – KINETICS AND CATALYSIS**  
2-3 credits.

Survey of kinetic principles and factors which influence reaction rates, with particular emphasis on catalysts and catalytic reactions. May include a seminar on modern catalytic research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 747 – ADVANCED COLLOID AND INTERFACE SCIENCE**  
3 credits.

Advanced topics in colloid and interface science. Topics include: intermolecular forces, stability of thin films, association colloids, liquid crystals, microhydrodynamics, electrostatics, electrokinetics, colloidal stability, and dispersion rheology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CBE 750 – ADVANCED CHEMICAL PROCESS SYNTHESIS AND OPTIMIZATION**  
3 credits.

Methodologies for synthesis and optimization of chemical process systems. Application of linear, nonlinear, and mixed integer programming to steady state process optimization, production planning, and flowsheet synthesis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CBE 770 – ADVANCED PROCESS DYNAMICS AND CONTROL**  
3 credits.

Modern methods for the mathematical analysis and control of dynamical systems. Application to physico-chemical systems. Real-time computer control.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**CBE/E C E/MATH 777 – NONLINEAR DYNAMICS, BIFURCATIONS AND CHAOS**  
3 credits.

Advanced interdisciplinary introduction to qualitative and geometric methods for dissipative nonlinear dynamical systems. Local bifurcations of ordinary differential equations and maps. Chaotic attractors, horseshoes and detection of chaos.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**CBE 781 – BIOLOGICAL ENGINEERING: MOLECULES, CELLS & SYSTEMS**  
3 credits.

Protein engineering and protein-protein interactions, receptor-ligand binding, cell metabolism and signaling, metabolic engineering and synthetic biology, tissue engineering. Additional topics may be covered such as: regenerative medicine, biomaterials, microbe-host interactions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CBE/B M E 782 – MODELING BIOLOGICAL SYSTEMS**  
3 credits.

Literature survey of mathematical models in biology at the molecular and cellular levels; application of chemical kinetics and thermodynamics to biological systems; comparison of deterministic and stochastic strategies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CBE/B M E 783 – DESIGN OF BIOLOGICAL MOLECULES**  
3 credits.

Introduction to the methodologies for engineering the structure and function of biological molecules, especially proteins. Develop an understanding for the integration of computation and experiment to address biological molecular engineering problems. Knowledge of biochemistry and cell biology [such as BIOCHEM 501 or ZOOLOGY 570] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019



**CBE 790 – MASTER'S RESEARCH OR THESIS**

1-9 credits.

Directed study projects arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Directed study projects arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE/B M E/B M I/BIOCHEM/COMP SCI/GENETICS 915 – COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**

1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE/BIOCHEM 932 – BIOTECHNOLOGY TRAINING PROGRAM SEMINAR**

1 credit.

Biotechnology Training Program trainees will present their research for critical review by audience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE 961 – SEMINAR-CHEMICAL ENGINEERING**

0-1 credits.

Seminar in Chemical Engineering.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE 990 – THESIS-RESEARCH**

1-12 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CBE 999 – ADVANCED INDEPENDENT STUDIES**

1-6 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 1997**CHEMISTRY (CHEM)****CHEM 101 – GENERAL CHEMISTRY I LABORATORY**

1 credit.

Stoichiometry and the mole concept, chemical reactions, thermochemistry, electronic structure of atoms, periodic properties, chemical bonding, intermolecular forces, and the behavior of gases, liquids and solids. Equivalent to laboratory-only part of CHEM 103. Provides a mechanism for awarding credit for experiences with no lecture component. The combination of CHEM 101 and CHEM 105 is equivalent to CHEM 103.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 102 – GENERAL CHEMISTRY II LABORATORY**

1 credit.

Principles and applications of chemical equilibrium, electrochemistry, thermodynamics, kinetics, organic chemistry and other topics that may include nuclear chemistry, biological chemistry and coordination chemistry. Equivalent to laboratory-only part of CHEM 104. Provides a mechanism for awarding credit for experiences with no lecture component. The combination of CHEM 102 and CHEM 106 is equivalent to CHEM 104.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 103 – GENERAL CHEMISTRY I**

4 credits.

Stoichiometry and the mole concept, the behavior of gases, liquids and solids, thermochemistry, electronic structure of atoms and chemical bonding, descriptive chemistry of selected elements and compounds, intermolecular forces, and chemistry laboratory skills.

**Requisites:** MATH 112, 114, 171, 221, or placement into MATH 211 or 221. Not open to students with credit for CHEM 109 or 115**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CHEM 104 – GENERAL CHEMISTRY II**

5 credits.

Principles and application of chemical equilibrium, coordination chemistry, oxidation-reduction and electrochemistry, kinetics, nuclear chemistry, introduction to organic chemistry, and chemistry laboratory skills.

**Requisites:** CHEM 103 and (MATH 112, 114, 171, or 221). Not open to students with credit for CHEM 109 or 115

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 105 – GENERAL CHEMISTRY I**

3 credits.

Stoichiometry and the mole concept, chemical reactions, thermochemistry, electronic structure of atoms, periodic properties, chemical bonding, intermolecular forces, and the behavior of gases, liquids and solids. Equivalent to lecture-only part of CHEM 103. Provides a mechanism for awarding credit for experiences with no laboratory component. The combination of CHEM 101 and CHEM 105 is equivalent to CHEM 103.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**CHEM 106 – GENERAL CHEMISTRY II**

4 credits.

Principles and applications of chemical equilibrium, electrochemistry, thermodynamics, kinetics, organic chemistry and other topics that may include nuclear chemistry, biological chemistry and coordination chemistry. Equivalent to lecture-only part of CHEM 104. Provides a mechanism for awarding credit for experiences with no laboratory component. The combination of CHEM 102 and CHEM 106 is equivalent to CHEM 104.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 108 – CHEMISTRY IN OUR WORLD**

5 credits.

Selected topics in inorganic and organic chemistry. Emphasis is on relevance to biological, environmental and social issues.

**Requisites:** Not open to students with credit for CHEM 104, 109, or 115

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 109 – ADVANCED GENERAL CHEMISTRY**

5 credits.

Accelerated coverage of topics in general chemistry, including introduction to laboratory techniques. Topics include atomic and molecular structure, chemical equilibrium, acid-base chemistry, thermodynamics, kinetics, and electrochemistry.

**Requisites:** MATH 113, 114, 171, or placement into MATH 221. Not open to students with credit for CHEM 104 or 115

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 115 – CHEMICAL PRINCIPLES I**

5 credits.

Explores a detailed atomic and molecular view of matter and its interactions, with a specific focus on quantum theory, molecular structure, and chemical bonding. Application required for enrollment.

**Requisites:** Consent of instructor

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 116 – CHEMICAL PRINCIPLES II**

5 credits.

A quantitative treatment of macroscopic phenomena including thermodynamics, chemical equilibria, solution behavior, electrochemistry, and chemical kinetics.

**Requisites:** CHEM 115

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 155 – STUDY ABROAD IN INTRODUCTORY CHEMISTRY**

1-6 credits.

Study abroad equivalency for introductory chemistry. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**CHEM 175 – INTRODUCTORY TOPICS IN CHEMISTRY**

1-3 credits.

Various topics in chemistry at the introductory level.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**CHEM 260 – ENTERING RESEARCH I**

1 credit.

Introduction to skills that support conducting research in chemistry.

**Requisites:** CHEM 103, 109, or 115**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 261 – ENTERING RESEARCH II**

1 credit.

Advanced skills that support conducting research in chemistry.

**Requisites:** (CHEM 299, 681, 691, or 699, BIOCHEM 699, CBE 599) or concurrent enrollment**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2016**CHEM 299 – DIRECTED STUDY**

1-4 credits.

Mentored research project as arranged with a faculty or academic staff member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHEM 311 – CHEMISTRY ACROSS THE PERIODIC TABLE**

4 credits.

Explores the properties, reactions and uses of elements and compounds, with emphasis on coordination chemistry of transition-metal ions, bioinorganic chemistry, solid-state structure and main-group elements. Introduces the synthesis and characterization of inorganic compounds.

**Requisites:** CHEM 104, 109, or 116**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 327 – FUNDAMENTALS OF ANALYTICAL SCIENCE**

4 credits.

Fundamentals of chemical measurement in chemistry, biology, engineering, geology, and the medical sciences. Topics include equilibria of complex systems, spectroscopy, electrochemistry, separations, and quantitative laboratory technique.

**Requisites:** CHEM 104 or 109. Not open to students with credit for CHEM 329.**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 329 – FUNDAMENTALS OF ANALYTICAL SCIENCE**

4 credits.

Fundamentals of chemical measurement in chemistry, biology, engineering, geology, and the medical sciences. Topics include equilibria of complex systems, spectroscopy, electrochemistry, separations, and quantitative laboratory technique. Covers chemical equilibria in greater depth and with greater mathematical rigor than CHEM 327.

**Requisites:** CHEM 104 or 109. Not open to students with credit for CHEM 327.**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 341 – ELEMENTARY ORGANIC CHEMISTRY**

3 credits.

Core organic chemistry concepts of structure, reactivity, and synthesis with regards to the functional groups commonly found in commercial and biological substances. Covers a selection of topics from CHEM 343 and 345.

**Requisites:** CHEM 104, 109, or 116. Not open to students with credit for CHEM 343 or 345**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 342 – ELEMENTARY ORGANIC CHEMISTRY LABORATORY**

1 credit.

Introduces organic laboratory techniques in synthesis, purification and spectral interpretation.

**Requisites:** CHEM 341 or concurrent enrollment. Not open to students with credit for CHEM 344**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CHEM 343 – ORGANIC CHEMISTRY I**

3 credits.

Principles of molecular structure and bonding applied to predict and explain the reactivity of alkanes, alkenes, alkynes, alkyl halides, alcohols, and thiols. Emphasis placed on rationalizing the stereochemical and regiochemical outcome of chemical processes.

**Requisites:** CHEM 104, 109, or 116**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 344 – INTRODUCTORY ORGANIC CHEMISTRY LABORATORY**

2 credits.

Introduces the basic synthesis, purification, and characterization techniques of organic chemistry, along with critical interpretation of experimental data.

**Requisites:** (CHEM 345 or concurrent enrollment) and (CHEM 102, 104, 109, or 116)**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 345 – ORGANIC CHEMISTRY II**

3 credits.

Principles of molecular structure and bonding applied to predict and explain the reactivity of aromatic systems, benzylic and allylic systems, aryl and vinyl halides, and carbonyl-containing compounds (e.g., ketones, carboxylic acids, esters, acid chlorides, amides). Emphasis placed on rationalizing the stereochemical and regiochemical outcome of chemical processes as well as arguing reaction outcomes from spectroscopic evidence.

**Requisites:** CHEM 343**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 346 – INTERMEDIATE ORGANIC CHEMISTRY LABORATORY**

1-2 credits.

Multi-step synthetic processes. Advanced experimental techniques such as high-vacuum distillation. Independent research projects.

**Requisites:** CHEM 344 and 345**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 350 – COMMUNICATING CHEMISTRY TO THE PUBLIC VIA DEMONSTRATIONS**

2 credits.

Gain experience in the safe and proper presentation of chemical demonstrations. Join experienced staff who enjoy doing demonstrations and who continue to develop the art of presenting them; learn from students, staff, and faculty from science departments, music, theater and other performing artists who combine their art with scientific experiments to share the joy and excitement of both artistic and scientific creativity. Public presentations will be offered both on and off campus to a wide variety of audiences (students, teachers, parents and the community at large) in a variety of settings (school settings and public venues).

**Requisites:** CHEM 103, 108 or 109**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**CHEM 355 – STUDY ABROAD IN INTERMEDIATE CHEMISTRY**

1-6 credits.

Study abroad equivalency for intermediate chemistry. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**CHEM 375 – INTERMEDIATE TOPICS IN CHEMISTRY**

1-4 credits.

Various topics in chemistry at the intermediate level.

**Requisites:** CHEM 104, 109, or 116**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**CHEM/M S & E 421 – POLYMERIC MATERIALS**

3 credits.

Polymer chemistry and physics terminologies, structure-property relationship, polymer characterization, polymer synthesis, material requirements for optoelectronics including conjugated polymers, thin film transistors, light emitting diodes, non-linear optical materials, holographic data storage and liquid crystal polymers.

**Requisites:** CHEM 341, 343, or member of Engineering Guest Students**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CHEM/CBE 505 – ASPECTS OF INDUSTRIAL CHEMISTRY AND BUSINESS FUNDAMENTALS**

3 credits.

Learn the chemistry and chemical engineering that defines societies' standard of living. Commercial chemical processes will be reviewed. Practical realities of how a discovery moves from research to commercial product will be taught through examples and case studies. Financial concepts that guide investment will be reviewed.

**Requisites:** Junior standing and CHEM 345, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CHEM 509 – SENIOR SEMINAR**

2 credits.

Synthesize and integrate advanced chemistry knowledge and skills. Through a series of seminars, specific research problems will be identified. Work in groups utilizing the chemical literature to identify routes to the solutions of these problems.

**Requisites:** (CHEM 561 or 565) and CHEM 563 or concurrent enrollment in CHEM 563

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CHEM 511 – ADVANCED INORGANIC CHEMISTRY**

3 credits.

Emphasizes the symmetry, structure and bonding of inorganic compounds. Selected topics may include applications in transition metal chemistry, organometallic chemistry, industrial catalysis, advanced bioinorganic chemistry, solid-state chemistry or main group chemistry.

**Requisites:** (CHEM 345 or concurrent enrollment and junior standing) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 512 – ADVANCED SYNTHESIS AND LABORATORY TECHNIQUES**

1-2 credits.

Synthesis, purification, and characterization of compounds spanning the sub-disciplines of inorganic chemistry, including main-group, transition metal, bioinorganic, organometallic, and solid-state compounds. Laboratory skills developed include Schlenk techniques, glovebox methods, and high-temperature methods, all with an emphasis on chemical safety. Characterization methods may include UV-visible and IR spectroscopy, multi-nuclear NMR spectroscopy, magnetic susceptibility, cyclic voltammetry, mass spectrometry, X-ray diffraction, and chromatographic methods.

**Requisites:** CHEM 311

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 524 – CHEMICAL INSTRUMENTATION**

3 credits.

Basic principles for designing, developing, and using chemical instrumentation and applying these principles in the laboratory. Spectroscopy, separations, and mass spectrometry instruments are emphasized.

**Requisites:** (CHEM 116, 327, or 329), CHEM 343, MATH 222, and (PHYSICS 202, 208, or 248)

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 547 – ADVANCED ORGANIC CHEMISTRY**

3 credits.

Modern principles of synthetic and mechanistic organic chemistry.

**Requisites:** CHEM 345

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 555 – STUDY ABROAD IN ADVANCED CHEMISTRY**

1-6 credits.

Study abroad equivalency for advanced chemistry. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**CHEM 561 – PHYSICAL CHEMISTRY**

3 credits.

Macroscopic theory: equilibrium thermodynamics, chemical kinetics and transport properties.

**Requisites:** (CHEM 116, 327, or 329), MATH 222, and (PHYSICS 201, 207, or 247). Not open to students with credit for CHEM 565

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 562 – PHYSICAL CHEMISTRY**

3 credits.

Molecular theory: quantum chemistry, molecular structure and spectra, statistical mechanics, selected topics in the molecular theory of matter in bulk.

**Requisites:** MATH 222, (PHYSICS 202, 208, or 248), and (CHEM 561, 565, CBE 310, or MSE 330)

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 563 – PHYSICAL CHEMISTRY LABORATORY I**

1 credit.

Principles of experimental physical chemistry applied to the acquisition of thermodynamic and kinetic data; use of basic physical laboratory equipment; related computations, analysis of errors, interpretation of results.

**Requisites:** (CHEM 116, 327 or 329) and (CHEM 561 or concurrent enrollment, CHEM 565 or concurrent enrollment, CBE 310, or M S & E 330)

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 564 – PHYSICAL CHEMISTRY LABORATORY II**

1 credit.

Principles of experimental physical chemistry applied to the acquisition and interpretation of basic data on molecular structure and dynamics, and properties of macromolecules; principles and use of spectroscopic and other electronic instrumentation.

**Requisites:** (CHEM 562 or concurrent enrollment) and CHEM 563

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 565 – BIOPHYSICAL CHEMISTRY**

4 credits.

Equilibrium thermodynamics, chemical kinetics, and transport properties, with emphasis on solution behavior and applications to biological macromolecules in solution. Focus on biological applications of physical chemistry.

**Requisites:** (CHEM 116, 327, or 329), MATH 222, (PHYSICS 201, 207, or 247), and (BIOCORE 383 or concurrent enrollment, BIOCHEM 501 or concurrent enrollment, or 507 or concurrent enrollment). Not open to students with credit for CHEM 561

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 575 – ADVANCED TOPICS IN CHEMISTRY**

1-4 credits.

Various topics in chemistry at the advanced level.

**Requisites:** CHEM 311, 327, 329, or 343

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 605 – SPECTROCHEMICAL MEASUREMENTS**

3 credits.

Determination of organic structures and reaction mechanisms using mass spectrometry and nuclear magnetic resonance techniques.

**Requisites:** CHEM 344 and 345, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 606 – PHYSICAL METHODS FOR STRUCTURE DETERMINATION**

1-3 credits.

A survey of spectroscopic methods for inorganic structure determination. Introduces major non-crystallographic techniques with an emphasis on the application to structural analysis. The basic theory and methodology of each form of spectroscopy will be presented. Topics covered include: ligand field theory, electronic absorption, Raman, Mossbauer and EPR spectroscopies, and magnetic susceptibility.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**CHEM 607 – LABORATORY SAFETY**

1 credit.

Aspects of laboratory safety relating to chemical, electrical, optical, mechanical, cryogenic and radiological hazards will be discussed. Safety equipment, techniques (including first aid), and facilities will be introduced.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 608 – SYMMETRY, BONDING, AND MOLECULAR SHAPES**

1-3 credits.

Elementary bonding theory and its application to understanding molecular geometry and reactivity. Emphasizes qualitative methods applied to the bonding of elements from throughout the periodic table.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 613 – CHEMICAL CRYSTALLOGRAPHY**

3 credits.

Theory of structural chemistry, experimental methods involved, applications to problems of chemical interest; use of diffractometric equipment and computer data analysis for an actual structure determination.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 622 – ORGANIC ANALYSIS**

2 credits.

Biological Mass Spectrometry: Fundamentals and Applications.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**CHEM 623 – EXPERIMENTAL SPECTROSCOPY**

2-3 credits.

Current spectroscopic methods employed in chemical analysis with applications in atomic and molecular absorption spectroscopy, infrared and Raman vibrational spectroscopy, fluorescence and light scattering; lecture and laboratory projects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**CHEM 624 – ELECTROCHEMISTRY**

2-3 credits.

Interfacial electron transfer and mass transport processes in electrochemistry, with applications to electroanalysis, electrodeposition and electrochemical separations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM/GENETICS 626 – GENOMIC SCIENCE**

2 credits.

Brings cutting-edge topics in the genomic sciences into the reach of those in chemistry, biology, engineering, computer science statistics fields. Enables biologically-oriented students to deal with advances in analytical science so that they may incorporate new genomic science concepts into their own scientific repertoires.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 629 – ATMOSPHERIC CHEMICAL MECHANISMS**

3 credits.

Focuses on the chemical mechanisms and kinetics of reactive gases and aerosol in Earth's atmosphere. Fundamental concepts from analytical, physical, and organic chemistry will be used as tools to describe atmospheric processes occurring in both the troposphere and the stratosphere. Specific topics include: Evolution and chemical composition of Earth's atmosphere; applications of the steady-state approximation; residence and renewal time; sources, transformation, transport and deposition of trace gases in the troposphere; air pollution control strategies; stratospheric chemistry.

**Requisites:** CBE 310 or concurrent enrollment in CHEM 561 or 565; or graduate/professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 630 – SELECTED TOPICS IN ANALYTICAL CHEMISTRY**

1-3 credits.

Lectures of a specialized nature in advanced analytical chemistry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**CHEM 635 – TOPICS IN COMPUTATIONAL CHEMISTRY**

1 credit.

An introduction to computational chemistry. Covers new techniques and developments in the literature, and specific types of calculations that are relevant to current research and needs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 636 – TOPICS IN CHEMICAL INSTRUMENTATION: INTRODUCTION TO NMR**

2 credits.

Theory and practice of nuclear magnetic resonance (NMR) spectroscopy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 637 – TOPICS IN CHEMICAL INSTRUMENTATION: ADVANCED METHODS IN NMR**

1-2 credits.

Advanced methods of nuclear magnetic resonance (NMR) spectroscopy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2017

**CHEM 641 – ADVANCED ORGANIC CHEMISTRY**

3 credits.

Topics in physical organic chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 652 – CHEMISTRY OF INORGANIC MATERIALS**

3 credits.

Materials chemistry of inorganic solids. Focuses on the application of chemical concepts to an understanding of properties of solids and how these properties are manifested in practical applications.

**Requisites:** Graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CHEM 653 – CHEMISTRY OF NANOSCALE MATERIALS**

3 credits.

Introduction to solid state materials chemistry, with an emphasis on contemporary topics in the chemistry of nanomaterials. Incorporates fundamental knowledge of solid-state chemistry and traditional materials chemistry with current nanoscale and nanostructural materials research.

**Requisites:** (CHEM 311 and 561) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 654 – MATERIALS CHEMISTRY OF POLYMERS**

2-3 credits.

Polymer classification, synthesis, and molecular architecture; solid state structure and characterization; glassy state and glass transition; polymer rheology in solids and gels; transport, dielectric and optical properties.

**Requisites:** CHEM 345 and (CHEM 561, 565 or CBE 310), or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 661 – CHEMICAL AND STATISTICAL THERMODYNAMICS**

3 credits.

Basic chemical thermodynamics with applications to chemical and phase equilibria and the study of solutions; introduction to statistical mechanics and calculation of thermodynamic quantities from molecular models; stability and fluctuations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 664 – PHYSICAL CHEMISTRY OF MACROMOLECULES**

2-3 credits.

Structure, thermodynamics, and dynamics of polymers in solution and in the bulk; theoretical models and experimental methods; polymer characterization.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CHEM/BIOCHEM 665 – BIOPHYSICAL CHEMISTRY**

4 credits.

Equilibrium thermodynamics, chemical kinetics and transport properties, with emphasis on solution behavior and application to noncovalent interactions of biological macromolecules in solution. Focus on biological applications of physical chemistry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 668 – BIOPHYSICAL SPECTROSCOPY**

2-3 credits.

Focuses on the underlying principles and applications of spectroscopic and microscopy methods employed to solve biological problems at the atomic and molecular level. Techniques covered include electronic absorption and fluorescence spectroscopy, circular dichroism, light scattering, fluorescence microscopy, multidimensional nuclear magnetic resonance and electron spin resonance.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 675 – INTRODUCTORY QUANTUM CHEMISTRY**

3 credits.

Basic principles of quantum chemistry, exactly solvable problems, angular momentum, approximation methods, applications to electronic structure.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 681 – SENIOR HONORS THESIS**

2-4 credits.

Mentored research for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**CHEM 682 – SENIOR HONORS THESIS**

2-4 credits.

Mentored research for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHEM 691 – SENIOR THESIS**

2-6 credits.

Mentored research for students completing a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**CHEM 692 – SENIOR THESIS**

2-6 credits.

Mentored research for students completing a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHEM 699 – DIRECTED STUDY**

1-6 credits.

Advanced mentored research project as arranged with a faculty or academic staff member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHEM 701 – RESPONSIBLE CONDUCT OF RESEARCH IN THE CHEMICAL SCIENCES**

1 credit.

Scientific integrity and professional behavior in the chemical sciences. Topics include conflict of interest, human and animal subjects in research, mentor and mentee responsibilities, collaborative research, peer review, data acquisition and management, research misconduct, responsible authorship and publication, and societal impacts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 3 number of completions**Last Taught:** Spring 2023**CHEM/BIOCHEM 704 – CHEMICAL BIOLOGY**

3 credits.

Chemistry and biology of proteins, nucleic acids and carbohydrates; application of organic chemistry to problems in cell biology, biotechnology, and biomedicine.

**Requisites:** Declared in Biochemistry or Chemistry graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CHEM 713 – INORGANIC AND ORGANOMETALLIC CHEMISTRY OF THE MAIN GROUP ELEMENTS**

1-3 credits.

Descriptive inorganic chemistry, organometallic chemistry of main-group elements, and organosilicon chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 714 – ORGANOMETALLIC CHEMISTRY OF THE TRANSITION ELEMENTS**

2-3 credits.

Fundamental and applied aspects of organotransition-metal chemistry, including structure and bonding, reactivity, and catalytic applications of organometallic complexes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 721 – INSTRUMENTAL ANALYSIS**

3-4 credits.

Chemical instrumentation and instrumental methods of analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 725 – SEPARATIONS IN CHEMICAL ANALYSIS**

2-3 credits.

Basic principles of chemical and biochemical separations by chromatography and electrophoresis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 728 – ELECTRONICS FOR CHEMICAL INSTRUMENTATION**

3 credits.

Learn and apply the principles of analog and digital electronics and computer interfaces for controlling and monitoring components of importance to chemical instrumentation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM 738 – INTRODUCTION TO MASS SPECTROMETRY**

1 credit.

Introduction to the theory and practice of mass spectrometry. Topics include gas chromatography/mass spectrometry (GCMS), electrospray ionization (ESI), matrix assisted laser-desorption ionization (MALDI), liquid chromatography/mass spectrometry (LCMS), imaging mass spectrometry, and ion mobility mass spectrometry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHEM/B M E/MED PHYS 750 – BIOLOGICAL OPTICAL MICROSCOPY**

3 credits.

Covers several aspects of state-of-the-art biological and biophysical imaging with an emphasis on instrumentation, beginning with an overview of geometrical optics and optical and fluorescence microscopy. The bulk of the course will focus on advanced imaging techniques including nonlinear optical processes (multi-photon excitation, second harmonic generation, and stimulated Raman processes) and emerging super-resolution methods. Special emphasis will be given to current imaging literature and experimental design. Knowledge of physics-based optics [such as PHYSICS 202] strongly recommended.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CHEM 758 – CHEMISTRY EDUCATION RESEARCH**

2 credits.

An introduction to chemistry education research and the theories that underpin it. Develop and refine models of learning on the basis of primary literature. Explore how theories of cognition could and should inform learning objectives and assessments in college chemistry learning environments. Substantial emphasis placed on critically reading and analyzing studies in the chemistry education research literature with an eye toward the implicit and explicit theories of cognition informing the work.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHEM 762 – MOLECULAR REACTION DYNAMICS**

2-3 credits.

Microscopic approach to chemical dynamics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**CHEM 763 – INTRODUCTION TO MOLECULAR SPECTROSCOPY**

2-3 credits.

Quantum mechanics of molecular rotation and vibration; principles of group theory; electronic, vibrational, and magnetic resonance spectroscopy in gas and condensed phases.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM/PHM SCI 766 – MOLECULAR RECOGNITION**

2-3 credits.

Origin, nature, classification, and description of intermolecular forces. The hydrophobic effect. Molecular complexes, binding constants, and their measurements. General principles of self-assembly, molecular recognition, complex formation, host design. Supramolecular systems and their dynamics. Micelles, bilayers, vesicles, biological membranes.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 775 – ELECTRONIC STRUCTURE OF MOLECULES**

2-3 credits.

Applications of quantum mechanics to the electronic structure and properties of molecules.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 777 – PHYSICAL CHEMISTRY OF SURFACES**

2-3 credits.

Structure, thermodynamics, kinetics, and reactivity of molecules at the interfaces between gases, liquids and solids, with applications to catalysis, atmospheric chemistry, monolayers, and thin films.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 801 – SELECTED TOPICS IN INORGANIC CHEMISTRY**

1-3 credits.

Various selected topics in contemporary inorganic chemistry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHEM 840 – ADVANCED TOPICS IN ORGANIC CHEMISTRY**

1-4 credits.

Various selected topics in contemporary organic chemistry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CHEM 841 – ADVANCED ORGANIC CHEMISTRY**

3 credits.

Synthesis of simple and complex organic compounds.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 842 – ADVANCED ORGANIC CHEMISTRY**

1-3 credits.

Various selected topics in contemporary organic chemistry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**CHEM 843 – ADVANCED ORGANIC CHEMISTRY**

1-3 credits.

Fundamental concepts in organic chemistry reactions and mechanisms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHEM 845 – MACROMOLECULAR CHEMICAL BIOLOGY**

2 credits.

Critically read, analyze and discuss the primary literature in chemical biology by focusing on topics associated with macromolecules (largely proteins and nucleic acids).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHEM 858 – SPECIAL TOPICS IN CHEMISTRY EDUCATION**

1-3 credits.

Various selected topics in contemporary chemistry education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022



**CHEM 860 – SELECTED TOPICS IN PHYSICAL CHEMISTRY**

1-3 credits.

Various selected topics in contemporary physical chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 864 – STATISTICAL MECHANICS**

2-3 credits.

Fundamentals of statistical mechanics; applications to equilibrium and non-equilibrium properties of gases and condensed phases.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CHEM/BIOCHEM 872 – SELECTED TOPICS IN MACROMOLECULAR AND BIOPHYSICAL CHEMISTRY**

1-3 credits.

Various selected topics in contemporary macromolecular or biophysical chemistry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 890 – HIGHLIGHTS AT THE CHEMISTRY-BIOLOGY INTERFACE**

1 credit.

Oral presentations on thesis research at the chemistry-biology interface. Includes discussions of reproducibility, rigor, and the responsible conduct of research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 900 – SEMINAR-INORGANIC CHEMISTRY**

0 credits.

Presentations of recent research in inorganic chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 901 – SEMINAR-TEACHING OF CHEMISTRY**

0-1 credits.

The role of the teaching assistant in undergraduate chemistry instruction. Effective utilization of instructional aids. Innovations for better teaching.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CHEM/BIOCHEM 918 – SINGLE MOLECULE APPROACHES TO BIOLOGY**

1 credit.

A combination of recent literature and original research presentations relating to the use of single molecule techniques in biochemistry including fluorescence microscopy, tethered particle motion, patch-clamping, cryo-electron microscopy, optical trapping, magnetic tweezers, and super resolution microscopy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CHEM 920 – SEMINAR-ANALYTICAL CHEMISTRY**

0 credits.

Presentations of recent research in analytical sciences and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 923 – GENOMIC SCIENCES PROGRAM SEMINAR**

1 credit.

Cross-disciplinary exposure to cutting edge research in genomic sciences. Seminars presented by trainees and other scientists who study genomics using approaches based in chemistry, computer science, biostatistics, engineering and biological and biomedical sciences. Research objectives, findings and future directions are discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 940 – SEMINAR-ORGANIC CHEMISTRY**

0 credits.

Presentations of recent research in organic chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**CHEM 941 – SEMINAR-SYNTHETIC ORGANIC CHEMISTRY**

0-1 credits.

Presentations of recent research in synthetic organic chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**CHEM 942 – SEMINAR-PHYSICAL ORGANIC CHEMISTRY**

0-1 credits.

Presentations of recent research in physical organic chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**CHEM 943 – SEMINAR-BIO-ORGANIC CHEMISTRY**

0-1 credits.

Presentations of recent research in bioorganic chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**CHEM/BIOCHEM 945 – SEMINAR-CHEMICAL BIOLOGY (ADVANCED)**

1 credit.

Presentations and discussions of recently published research in chemical biology and related areas.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 960 – SEMINAR-PHYSICAL CHEMISTRY**

0-2 credits.

Presentations of recent research in physical chemistry and related areas by external and internal speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 980 – SEMINAR: REVIEW OF CURRENT RESEARCH**

1 credit.

Research discussions facilitated by individual faculty members and occurring between all members of the research group.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CHEM 990 – RESEARCH**

1-15 credits.

Research supervised by individual faculty members.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## CHICANA/O AND LATINA/O STUDIES (CHICLA)

**CHICLA/AFROAMER/AMER IND/ASIAN AM/FOLKLORE 102 – INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES**

3 credits.

Introduction to comparative ethnic studies, examining race, ethnicity, and indigeneity within the United States. Includes perspectives from African American, American Indian, Asian American, and Chican@ and Latin@ studies.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHICLA/HISTORY 151 – THE NORTH AMERICAN WEST TO 1850**

3–4 credits.

Explores the history of places that have been called the American West before 1850. We start with Indigenous occupation; continue with European invasion and the creation of two new nations, Mexico and the U.S.; and end with U.S. conquest. We watch Indian lands becoming the object of Spanish, French, and English empires, and then see European incursions giving way to the hopes of new nation-states and newly empowered Indian peoples like Lakotas and Comanches. After studying the trails and trades that brought newcomers west, we reach key converging events: U.S. seizure of the Mexican North, resolution of the Oregon boundary dispute, discovery of western gold, West Coast arrival of Chinese immigrants, and Mormon exodus to the Great Basin. We use economic, environmental, political, cultural, and social analyses, and we attend to the dreams of many westerners: of North American, Latin American, European, African, and Asian origin or descent, and of all genders and class statuses.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/HISTORY 152 – THE U.S. WEST SINCE 1850**

3–4 credits.

This course explores the history of places that have been called the American West since 1850. We start with incorporation, as the U.S. surveyed a West that had become American in name and tried to make it American in fact, a process that westerners resisted as often as they welcomed it. By the late 19th century, the West was an identifiable region with characteristic economic features, race relations, and federal ties, and it held a unique place in collective memory. In the 20th century, western distinctiveness faded in some ways and persisted in others, and western variants unfolded of the world wars, Depression, Cold War, and Vietnam War; civil rights; suburbanization and the New Right; environmentalism; immigration; and globalization. We employ economic, environmental, political, cultural, and social analyses, and attend to the dreams of many westerners: people of North American, Latin American, European, African, and Asian descent, and of all genders, classes, and sexualities.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA/HISTORY 153 – LATINA/LATINO/LATINX HISTORY**

3–4 credits.

Examines the historical, social, and legal experiences of Latinas/Latinos/Latinxs in the US since the mid-1800s with emphasis on Mexican migrations. Latinxs became an important part of the US population through western expansion, conquest, and immigration. We will learn about the 3 main Latinx groups in the US: Mexicans, Puerto Ricans, and Cubans, but will also learn about other Latinx communities. We begin with an examination of conquest by studying the Treaty of Guadalupe Hidalgo that annexed roughly half of former Mexican territory and the Spanish-American War that resulted in the possession of Puerto Rico. Then, we examine the history of Latinx immigration to understand the experiences of Mexicans, Central Americans, South Americans, and people from the Caribbean who have immigrated to the US in search of economic opportunities and political asylum. This course serves as an introduction to the varied experiences of Latinxs in the US in order to understand their unique histories.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**CHICLA 201 – INTRODUCTION TO CHICANA/O AND LATINA/O STUDIES**

3 credits.

Introduction to the interdisciplinary study of Chicanas/os in the United States. Become acquainted with recent scholarly literature, paradigms, theories, and debates within Chicana/o studies pertaining to the historical, economic, cultural, and sociopolitical dimensions of the Chicana/o experience in the United States.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA 210 – CHICANA/O AND LATINA/O CULTURAL STUDIES**

3 credits.

Introduction to the cultural worlds of Chicana/os and Latina/os in the U.S. Examines how diverse peoples came to understand themselves as members of a racial, ethnic, and cultural community by exploring the production of music, art, theater, film, television, and literature.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CHICLA/POLI SCI 231 – POLITICS IN MULTI-CULTURAL SOCIETIES**

3-4 credits.

Race, ethnicity, and religion as political factors; cultural pluralism, politics, and policy in the United States and selected other multi-cultural politics.

**Requisites:** Freshman or sophomore standing only

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CHICLA/GEN&WS/HISTORY 245 – CHICANA AND LATINA HISTORY**

3 credits.

Introduces the cultural, economic, social, and political history of Chicanas and Latinas in the U.S. and focuses on four major themes: contact between different ethnic/racial groups; ideas of nation and nationalism; constructions of identity; and struggles for social justice.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CHICLA/HISTORY/LACIS/POLI SCI 268 – THE U.S. & LATIN AMERICA FROM THE COLONIAL ERA TO THE PRESENT: A CRITICAL SURVEY**

3 credits.

A critical examination of US-Latin American relations from the colonial era to the present, tracing the emergence and evolution of the United States as a hemispheric and global power and its political and economic impact on Latin America. Primary attention will be focused on US relations with Mexico, Central America and the Caribbean, but other Latin American countries will figure prominently during certain episodes.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**CHICLA 299 – DIRECTED STUDY**

1-3 credits.

Introductory independent research, readings or projects mentored by faculty.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2012

**CHICLA 301 – CHICANA/O AND LATINA/O HISTORY**

3 credits.

Examines the history of the making of a people from pre-hispanic time to the present. Examines how people of Mexican and Latin American descent in the United States have come to think of themselves as constituting a collectivity by examining the social, cultural, and political worlds of Chicana/os and Latina/os.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHICLA/POLI SCI 302 – MEXICAN-AMERICAN POLITICS**

3-4 credits.

This class examines the major problems and issues in Mexican-American politics since World War II. An emphasis will be placed on the ways in which race, class and culture have structured politics for the Mexican origin people. Not open to students with credit for POLI SCI 464 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHICLA/CURRIC 306 – LATINX LITERACIES**

3 credits.

Addresses how members of Latinx communities have used writing for both personal and social change. Develop a deeper understanding of the political, family, and school contexts in which Latinx peoples in the United States write and read.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CHICLA/GEN&WS/GEOG 308 – LATINX FEMINISMS: WOMEN'S LIVES, WORK, AND ACTIVISM**

3 credits.

An examination of Latinx women's lives, experiences, and activism through the lens of testimonio, life histories, and feminist writings rooted in social justice movements and critical pedagogies.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CHICLA 315 – RACIAL FORMATION AND WHITENESS**

3 credits.

Examines the construction of whiteness in the United States from the colonial period to the present with an eye to the ways in which Chicana Latinx communities have engaged with whiteness. Learn and apply a variety of relevant racial theories to historical cases, exploring the process of racialization through specific racial projects in time and space. Evaluate theories about identity, citizenship, and justice that influence contemporary anti-racist praxis and develop writing skills through essays that take positions on debates within Chicana Latinx studies.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/CURRIC 321 – CHICANO/LATINO EDUCATIONAL JUSTICE**

3 credits.

Addresses the ways Chicana@s/Latina@s in contemporary U.S. society have engaged in social, cultural, political, and ideological struggles for educational justice. Begins with a broad overview of educational issues and examines major social movements, legal cases, and local and national efforts that have established important precedents. Focus on different enactments of resistance, struggle, resilience, self-determination, and educational justice and focus on how these precedents and enactments pertain to teaching, learning, and curriculum practices that reflect key tenets of educational justice for Chicana@/Latina@ students.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**CHICLA 328 – CULTURES AND HISTORIES TOPICS IN CHICANA/O & LATINA/O STUDIES**

3 credits.

Topics in Chicano/a Studies: An examination of specific themes in Chicano/a life, ways and culture, with readings drawn primarily from the arts and humanities.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 10 number of completions**CHICLA 329 – EDUCATION AND SERVICE TOPICS IN CHICANA/O & LATINA/O STUDIES**

3 credits.

An examination of specific themes in Chicano/a life, ways and culture, with readings drawn primarily from fields related to education, social service, and applied social science.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 10 number of completions**CHICLA 330 – TOPICS IN CHICANO/A STUDIES**

3–4 credits.

An examination of specific themes in Chicano/a life, ways and culture. Topics may include border culture, Chicano/a ethnicity and identity, and Mexican immigration to the United States.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHICLA/COUN PSY 331 – IMMIGRANT HEALTH AND WELLBEING**

3 credits.

Develop an understanding of immigrant health in the United States from the perspective of social and structural determinants. Applies concepts to a comprehensive framework for the development of health. Describes health assets and risks for specific vulnerable immigrant groups, such as women, children, and undocumented individuals and mixed immigration status families. Provides guidelines for improving immigrant access to quality health care, including language services, provider competence, policy and organizational supports, and community-based collaboration, advocacy, and research.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**CHICLA/GEN&WS 332 – LATINAS: SELF IDENTITY AND SOCIAL CHANGE**

3 credits.

Explores the multiracial and multicultural reality of Latina societies by becoming familiar with the history and cultures of Chicana, Cuban-American, and Puerto Rican women. Interdisciplinary readings in law, journalism, public policy, history, and self-reflective literature.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CHICLA/COM ARTS 347 – RACE, ETHNICITY, AND MEDIA**

3 credits.

Introduction to the changing images of race and ethnicity in U.S. entertainment media and popular culture. Surveys history, key concepts and contemporary debates regarding mediated representation of ethnic minorities. Critical and cultural studies approaches are emphasized.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA/HISTORY/LACIS/POLI SCI 355 – LABOR IN THE AMERICAS: US & MEXICO IN COMPARATIVE & HISTORICAL PERSPECTIVE**

3 credits.

Provides a critical examination of the history of labor and working people in the Americas, from the colonial era to the present. It focuses on the experience of the United States and Mexico, offering a comparative perspective on their distinct but also shared (and increasingly linked) histories. The seminar proceeds chronologically, highlighting major episodes in the evolution of labor systems in the two countries, beginning with the colonial labor systems implemented by the Spanish and British empires following the European conquest of the Western Hemisphere. Among other topics, we will examine the pivotal role of slavery and other forms of forced labor, the impact of the industrial revolution, the emergence and expansion of corporate capitalism and the labor unrest it provoked in the post-civil war U.S., the role of labor in the Mexican Revolution and its aftermath, the impact of the Great Depression and labor incorporation on the post-WWII social and political order of both countries, the breakdown of that order and the move to neo-liberalism in the 1970s and 1980s, and the emergence of an increasingly integrated North American production system and its consequences for labor and working people on both sides of the US-Mexico border.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**CHICLA/SPANISH 364 – SURVEY OF LATINO AND LATINA POPULAR CULTURE**

3 credits.

Analysis of Latina and Latino popular culture to consider the varied make-up of Latinos, their specific histories, social dynamics and politics through their creative expressions, performances and cultural contestations.

Covers key terms and concepts, cultural developments, and diverse interpretations while focusing in the analysis of Latinx music, performance art, film and media, sports, food, and car culture. Other topics include the production, circulation and reception of Latinx popular culture, the use of Spanish and English languages, issues of identity, migration and interculturality, the role of the cultural industry, and the context of globalization. Broadly explores the intersectionality of race, ethnicity, class, gender, sexuality, and nation regarding Latinos. Taught in Spanish.

**Requisites:** SPANISH 223 and 224**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/ENGL 368 – CHICANA/O AND LATINA/O LITERATURES**

3 credits.

Historical, political, and aesthetic roots and directions of Latin@ and Chican@ short stories, novels, poetry, music, plays, films, and essays.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/COM ARTS 419 – LATINO/AS AND MEDIA**

3 credits.

Critical and historical survey of the participation and representation of Latino/as in U.S. film, television, and popular culture, with a primary focus on Hispanic representation in Hollywood-produced imagery. The counter-images of Latino and Latina media producers also will be explored.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CHICLA/HISTORY/POLI SCI 422 – LATINO HISTORY AND POLITICS**

3 credits.

Students will examine the historical, social, political, economic, and cultural experiences and conditions of Latinos, one of the largest US racial/ethnic minority groups. Course focus is on people who trace their origins to Mexico, the Caribbean, and countries of Latin America.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**CHICLA/HISTORY 435 – COLONY, NATION, AND MINORITY: THE PUERTO RICANS' WORLD**

3 credits.

A historical introduction to the Puerto Rican experience, from island to mainland. Varieties of colonial rule, social institutions, cultural processes, and ethnic and national identity. Migration to the U.S. and social dynamics of stateside communities.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2013**CHICLA/LEGAL ST/SOC 440 – ETHNICITY, RACE, AND JUSTICE**

3–4 credits.

An examination of ethnicity, race, and justice, with a specific emphasis on US Latinos, the largest minority group in the United States.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/LEGAL ST/SOC 443 – IMMIGRATION, CRIME, AND ENFORCEMENT**

3–4 credits.

A study of immigration, crime, and border enforcement, engaging both historical and present-day debates, focusing on Latino immigration and the U.S.–Mexico border.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA/ENGL 460 – BLACK AND LATINX IN LITERATURE AND VISUAL CULTURE**

3 credits.

Chicanxs and Latinxs are frequently imagined in ways that erase the history, presence, and influence of African-descended peoples within these groups. However, this anti-Blackness does not go unanswered in Chicanx and Latinx cultural production. Covers literature, life-writing/autoethnography, visual culture, philosophy/theory, and history that takes up Black Latinx experience and/or that comparatively explores the African American and Latinx convergences, exploring a rich vein of thought and representation in U.S. literatures that is often more transamerican than American and that offers new definitions of both Latinx and Black. Readings on racial paradigms in the Americas, paying attention to the differences between US and Latin American contexts, as well readings on decoloniality, intersectional feminisms, borderlands, and diaspora.

**Requisites:** Declared in Chicana/o and Latina/o Studies (major or certificate) or English major, and sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No



**CHICLA/SPANISH 467 – US LATINO LITERATURE**

3 credits.

Study the literature of Latinos and Latinas in the United States, particularly of writers of Mexican, Puerto Rican, Cuban, Dominican and Central American descent. Examines the impact of race and how individuals and communities negotiate situations of internal colonialism, migration, generational conflicts, tensions between assimilation and cultural preservation, gender roles, literary traditions, and transnational situations. Considers the linguistic, cultural and formal singularity of Latinx literature, the use of Spanish and English languages, the advent of feminist and queer writing, and the vision of the United States in their works regarding its past, its present and its future. Explores the intersectionality of race, ethnicity, class, gender, sexuality, and literary forms. Diverse theories and ways to read literary texts will be explored. Literary texts – novels, short stories, poetry and essays – will be read in English or Spanish, or a combination of both. Taught in Spanish

**Requisites:** SPANISH 223 and 224**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA/SPANISH 469 – TOPICS IN LATINX CULTURE**

3 credits.

Focuses on the cultural evolution of Chicanos, Puerto Ricans, Cuban-Americans, and other U.S. Latinos in relation to their countries of origin. Topics vary.

**Requisites:** SPANISH 223 and 224 or (SPANISH 361, 363, or 468)**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**CHICLA/SOC 470 – SOCIODEMOGRAPHIC ANALYSIS OF MEXICAN MIGRATION**

3 credits.

Introduces students to social and demographic analysis and explanations of the historical and present day causes and consequences of migration of the largest immigrant group to the United States in the 20th century.

**Requisites:** SOC 134, 170, 181, ASIAN AM/SOC/ASIAN AM 220, CE SOC/SOC/C&E SOC 140, 210, 211, CHICLA 201, CHICLA 210, or CHICLA/POLI SCI/CHICLA 231; or graduate/professional standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**CHICLA/LAND ARC 475 – LATINO URBANISM: DESIGN AND ENGAGEMENT IN THE AMERICAN CITY**

3 credits.

Urban design in the 21st century American city explores a new understanding of urban placemaking and development. Explores the intersections of culture, place, and design to critically address how the socioeconomic dynamics that underlie demographic shifts in the U.S. are influencing urban change in the American landscape. Focuses on the evolution and ways by which Latinos shape the built environment, both in the public realm and in the home.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**CHICLA/SPANISH 478 – BORDER AND RACE STUDIES IN LATIN AMERICA**

3 credits.

Drawing from cultural studies, border studies and/or critical race theory, this course explores through cultural and literary texts the social and political issues regarding migration, contact zones, transculturation, and/or diaspora.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CHICLA 501 – CHICAN@ AND LATIN@ SOCIAL MOVEMENTS IN THE U.S.**

3 credits.

Explores Chicana/o and Latina/o social movement participation and collective action from the 1940s to the contemporary moment. Using interdisciplinary scholarship and mixed media, analyze paradigms, theories, and debates pertaining to the historical and contemporary economic, cultural, and sociopolitical dimensions of the Latina/o position in the United States. Focuses on social movements and collective action (rooted in labor, community, civil and human rights organizing) and the topics of race and racialization, power and powerlessness, migration, community development, and gender. Compares the experiences of different Latin@ groups.

**Requisites:** CHICLA 201, 230, CHICLA//AFROAMER/AMER IND/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA/POLI SCI/CHICLA 231, or CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**CHICLA 520 – LATINX DIGITAL PUBLICS**

3 credits.

Study and reflect on Latinx unequal access to media and the political and social context of media in Latinx communities. Develop research, writing, editing and copyediting, collaboration, and project management skills while contributing to Latinx Studies research. Create content for such online outlets as Latinx Talk, La Bloga, Latinx Project, Wikipedia and UW-Madison publications.

**Requisites:** CHICLA 201**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA/COUN PSY 525 – DIMENSIONS OF LATIN@ MENTAL HEALTH SERVICES**

3 credits.

Provides training for students who aspire to one of the helping, health, or mental health professions and who currently work or who envision themselves working with Latin@ populations. Provides important frameworks for working with Latin@s, including cultural, spiritual, linguistic and historical features relevant to this population and begin to apply their knowledge in service learning placements.

**Requisites:** Junior standing or 6 credits of CHICLA**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CHICLA 530 – ADVANCED TOPICS IN CHICANA/O AND LATINA/O STUDIES**

1-4 credits.

Topics vary each semester, but may include history, literature, media, political science, culture, social work, etc., as they relate to Chicana/os and Latina/os in the United States.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CHICLA 699 – DIRECTED STUDY**

1-3 credits.

Advanced independent research, readings or projects mentored by faculty.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CIVIL AND ENVIRONMENTAL ENGINEERING (CIV ENGR)****CIV ENGR 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Sophomore standing**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CIV ENGR 150 – INTRODUCTION TO ARCHITECTURAL THEORY**

3 credits.

A survey of architectural design theory through research analysis and criticism of works and ideas of significant architects and architectural theorists.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 151 – ARCHITECTURAL MAKING I**

3 credits.

Introduction to architecture and architectural making. 2D and 3D form and space tested through the theoretical, pragmatic, and contextual issues that influence architecture.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 152 – ARCHITECTURAL MAKING II**

3 credits.

Survey and application of twentieth century design techniques in architecture.

**Requisites:** None**Repeatable for Credit:** No**CIV ENGR 155 – ARCHITECTURAL THINKING**

3 credits.

Canonical buildings since 1800 alongside their accompanying theoretical texts are evaluated within the discipline and allied fields of inquiry.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2022**CIV ENGR 159 – CIVIL ENGINEERING GRAPHICS**

2 credits.

Graphical communication including lettering, drawing equipment and techniques; geometric constructions, orthographic projections, technical sketching, isometric views, descriptive geometry, and computer-aided design drawing, with applications specific to civil engineering.

**Requisites:** Not open to students with credit for M E 170.**Repeatable for Credit:** No

**CIV ENGR 250 – ARCHITECTURAL VISUALIZATION**

3 credits.

Development of precise standards of drawing and the history and techniques of descriptive and analytical drawing.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR/G L E 291 – PROBLEM SOLVING USING COMPUTER TOOLS**

4 credits.

Introduction to engineering computations with emphasis on computer tools and computer based measurement, data collection, and processing. Tools will include computer aided drafting, spreadsheets, other engineering computation tools, and hardware and software for laboratory and spatial measurements.

**Requisites:** MATH 222, 276, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 299 – INDEPENDENT STUDY**

1-3 credits.

Under faculty supervision.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**CIV ENGR 310 – FLUID MECHANICS**

3 credits.

Fluid statics and dynamics, dimensional analysis, flow of an ideal fluid, flow of a real fluid--including laminar and turbulent flow, applications to engineering problems.

**Requisites:** (MATH 234 or 375) and (E M A 202 or M E 240), graduate/professional standing, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 311 – HYDROSCIENCE**

3 credits.

Introduction to the water cycle, its relationship to the environment and human attempts to conserve, control, and utilize water judiciously. Fundamentals of hydrology, hydraulics, coastal engineering and water resources engineering.

**Requisites:** MATH 222, 276, graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 320 – ENVIRONMENTAL ENGINEERING**

3 credits.

Fundamental sanitary aspects of environmental engineering. Role of the engineer in the control of the environment; water supply and wastewater problems; solid waste disposal; air pollution; and administration in environmental engineering.

**Requisites:** CHEM 104, 109, 116, graduate/professional standing, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 322 – ENVIRONMENTAL ENGINEERING PROCESSES**

3 credits.

Combination of theory and laboratory practice to study basic unit operations and processes in environmental engineering. Emphasis on water and wastewater treatment processes, such as coagulation/flocculation, chemical precipitation, filtration, adsorption, activated sludge, anaerobic digestion, and substrate utilization kinetics.

**Requisites:** CIV ENGR 320, CBE 250, BSE 249, graduate/professional standing, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR 324 – ENVIRONMENTAL ENGINEERING THERMODYNAMICS**

3 credits.

A systematic introduction to the application of the first and second laws of thermodynamics to systems relevant to environmental engineering. Energy balances used to solve environmental engineering problems in flowing and non-flowing systems. Examines the relationship between energy, heat and work using theoretical and practical models. Chemical reactions as well as gas and fluid mixing from a thermodynamics perspective. Performance limits imposed by the second law of thermodynamics on devices used in power generation, fluid flow, refrigeration, and air conditioning.

**Requisites:** (CHEM 104 or 109), MATH 234, and (E M A 201, PHYSICS 201 or 207), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR 325 – ENVIRONMENTAL ENGINEERING MATERIALS**

3 credits.

Properties and tests of materials used in the treatment and conveyance of water and air. Introduction to laboratory and field measurement techniques to assess material performance capabilities. Technical report preparation.

**Requisites:** CIV ENGR 320 and E M A 201, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CIV ENGR/G L E 330 – SOIL MECHANICS**

3 credits.

Basic principles of soil mechanics and fundamentals of application in engineering practice; soil composition and texture; classification; permeability and seepage; consolidation; settlement; shear strength; lateral earth pressures and retaining structures, shallow and deep foundations, slope stability; subsurface exploration; laboratory characterization of physical and engineering properties of soils.

**Requisites:** E M A 303 or M E 306, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 340 – STRUCTURAL ANALYSIS I**

3 credits.

Analysis of statically determinate and indeterminate beams, trusses, and rigid frames; deflections by virtual-work, moment-area; influence lines; force methods; structural design loads, introduction to structural design, approximate methods.

**Requisites:** (E M A 303 or M E 306) and E M A/M E/E M A 307, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 352 – FRANK LLOYD WRIGHT - DESIGN SEMINAR**

3 credits.

Introduction to the design language of Frank Lloyd Wright. Beginning understanding of his architectural design process, his methods, tools and processes in building design and construction.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 360 – CONSTRUCTION SYSTEMS**

3 credits.

Introduction to the parts and pieces of a building at the construction level. How a building is built from start to finish, and how the individual building systems affect one another. Systems, how they interact, design and construction, cost implications, schedule implications.

**Requisites:** E M A 201, PHYSICS 201, 207, 247, graduate/professional standing, or member of Engineering Guest Students. Not open to students with credit in CIV ENGR 290.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CIV ENGR 370 – TRANSPORTATION ENGINEERING**

3 credits.

Characteristics of transportation supply and demand; measuring and estimating demand; social and environmental impacts; planning of transportation systems; characteristics of transportation modes; interaction between modes; mode interfaces; transportation technology; economics; public policy, implementation and management.

**Requisites:** STAT 311, 324 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/BSE/SOIL SCI 372 – ON-SITE WASTE WATER TREATMENT AND DISPERSAL**

2 credits.

On-site treatment and dispersal of waste water from homes, commercial sources and small communities. Sources, pretreatment units, nutrient removal units, constructed wetlands, surface and soil dispersal systems, recycle and reuse systems, regulations, alternative collection systems.

**Requisites:** CHEM 103, 109, or 115

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR/ENVIR ST/GEOG 377 – AN INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS**

4 credits.

Design, implementation and use of automated procedures for storage, analysis and display of spatial information. Covers data bases, information manipulation and display techniques, software systems and management issues. Case studies.

**Requisites:** Sophomore standing, member of Engineering Guest Students, or declared in Capstone Certificate in GIS Fundamentals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 392 – BUILDING INFORMATION MODELING (BIM)**

3 credits.

An introduction to the use of Building Information Modeling (BIM) technology in the construction industry. Gain experience in using computer tools such as the Autodesk Revit Family to model building designs.

**Requisites:** M E 160, 170, or 231, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/E M A 395 – MATERIALS FOR CONSTRUCTED FACILITIES**

3 credits.

Properties and tests of materials used in the initial construction or repair of facilities (including buildings, transportation systems, utility systems, and reinforced earth). Introduction to laboratory and field measurement techniques to assess material performance capabilities. Technical report preparation.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 410 – HYDRAULIC ENGINEERING**

3 credits.

Engineering approaches to measurement, control and conveyance of water and wastewater flows, emphasizing analysis, design, characteristics and selection of: measurement devices, distribution and collection pipe systems, and pumps and turbines with consideration of plant, quality, economic, reliability, and security aspects.

**Requisites:** CIV ENGR 310, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 411 – OPEN CHANNEL HYDRAULICS**

3 credits.

Analysis and characteristics of flow in open channels (natural and artificial); channel design considerations including uniform flow (rivers, sewers), flow measuring devices (weirs, flumes), gradually varied flow (backwater and other flow profiles, flood routing), rapidly varied flow (hydraulic jump, spillways), and channel design problems (geometric considerations, scour, channel stabilization, sediment transport).

**Requisites:** CIV ENGR 310, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**CIV ENGR 412 – GROUNDWATER HYDRAULICS**

3 credits.

Engineering fundamentals of groundwater flow. Mass and momentum conservation, diffusion, and dispersion. Applications to wells, recharge, plumes, and convective transport. Physical models and elementary numerical methods, including flow nets. Some laboratory work.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**CIV ENGR 414 – HYDROLOGIC DESIGN**

3 credits.

An introduction to the design of engineering structures which control and/or utilize runoff, emphasizing the sizing of structures to meet hydrologic uncertainty. Applies principles and techniques from several disciplines, including hydrology, hydraulics, probability and statistics. Specific techniques include flood frequency analysis; risk analysis; design storm and historic storm techniques; rainfall-runoff modeling.

**Requisites:** CIV ENGR/G L E/CIV ENGR 291 and CIV ENGR 311, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CIV ENGR 415 – HYDROLOGY**

3 credits.

Water cycle as related to air mass properties and movement, precipitation, evaporation, snowmelt, infiltration, streamflow, floods, and groundwater. Statistical hydrology, and hydrologic simulations--including runoff prediction, streamflow and reservoir routing, impoundment operation studies, and urban hydrology.

**Requisites:** CIV ENGR/G L E/CIV ENGR 291 and CIV ENGR 311, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CIV ENGR 416 – WATER RESOURCES SYSTEMS ANALYSIS**

3 credits.

Water supply and demand are increasingly stressed by climate, population, land-use, policy, etc. Presents a variety of systems analysis techniques for water resources planning and management. Deterministic and stochastic optimization and simulation models will be developed and applied.

Problems addressed include water supply, water quality, and river basin development.

**Requisites:** CIV ENGR 311, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CIV ENGR/G L E 421 – ENVIRONMENTAL SUSTAINABILITY ENGINEERING**

3 credits.

Uses the three paradigms of sustainability (environmental, social, and economic) for strategic environmental initiatives in an engineering setting. Proactive environmental management opportunities, including practices of pollution prevention, industrial ecology, and design for the environment. A systems approach to manufacturing, examining the life cycle of products, incorporating total cost accounting, extended producer responsibility, and design for end-of-life.

**Requisites:** (MATH 217, 221, or 275) and (CHEM 104 or 109), or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 422 – ELEMENTS OF PUBLIC HEALTH ENGINEERING**

3 credits.

Overview of the public health profession and the role of environmental sanitary engineers in public health. Introduction to chemical and microbial contaminants of public health concern - their routes of exposure and development of regulatory standards for drinking water, air, hazardous wastes, and industrial workplaces. Introduction to occurrence, toxicity, and virulence as components of public health risk and the engineer's role in identifying occurrence and design of engineering controls for public health protection.

**Requisites:** CIV ENGR 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CIV ENGR 423 – AIR POLLUTION EFFECTS, MEASUREMENT AND CONTROL**

3 credits.

The influence of man-caused pollution on the atmosphere, globally and locally. Evaluation of human health, economic, and aesthetic effects of air pollution. Techniques for measurement of atmosphere pollutant concentrations and determination of local and regional air quality. Detailed presentation of air pollution sources and methods for their control. The role of local, state and federal government in air pollution control.

**Requisites:** Senior standing and declared in Biomed, Biological Sys, Chemical, Civil, Computer, Electrical, Environmental, Geological, Industrial, Mechanical or Nuclear Egr, Mat Sci Egr, Egr Physics, Egr Mechanics, grad/prof standing or member of Egr Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 424 – ENVIRONMENTAL ENGINEERING LABORATORY**

2 credits.

Basic chemistry and chemical calculations applied to environmental engineering, lab methods and interpretation of results for chemical and biological analyses of water and wastewater.

**Requisites:** CIV ENGR 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**CIV ENGR 425 – ENVIRONMENTAL ENGINEERING MICROBIOLOGY**

3 credits.

Microbial interactions in soils, water, extreme environments and biofilms. Modern methods for studying microbial ecology. Role of microbes in nutrient cycles and biogeochemistry. Use of microbes for mitigating human-made environmental problems of industrial, agricultural, and domestic origin. Emphasis on engineered systems.

**Requisites:** MICROBIO 303 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 426 – DESIGN OF WASTEWATER TREATMENT PLANTS**

3 credits.

Unit operations in wastewater treatment; physical, chemical, and biological processes for treatment of wastewater; sludge treatment and disposal; design of a wastewater treatment plant; site visits to wastewater treatment plants.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 427 – SOLID AND HAZARDOUS WASTES ENGINEERING**

3 credits.

Basic concepts in designing, evaluating, and operating solid wastes storage, collection, and disposal systems; waste reduction, resource recovery, incineration and land disposal methods; hazardous wastes engineering; legal, political, and administrative considerations.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**CIV ENGR 428 – WATER TREATMENT PLANT DESIGN**

3 credits.

Preliminary studies and design of water treatment processes and subordinate plant facilities; project control of design project; unit operations in water treatment; groundwater treatment; preliminary cost estimates; introduction of computer-aided design concept; site visits to water treatment plants.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 430 – INTRODUCTION TO SLOPE STABILITY AND EARTH RETENTION**

1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 432 – INTRODUCTION TO SHALLOW AND DEEP FOUNDATION SYSTEMS**

1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 434 – INTRODUCTION TO UNDERGROUND OPENINGS ENGINEERING**

1 credit.

Subsurface stress; rock failure criteria; openings in competent rock; openings in layered rocks; plastic behavior around openings in weak rock; stereographic projections and stereonet; block theory; rock bolts; stabilization methods and design.

**Requisites:** G L E/CIV ENGR/G L E 330, G L E/M S E/CIV ENGR/GEOSCI/CIV ENGR/G L E/M S & E 474 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 440 – STRUCTURAL ANALYSIS II**

3 credits.

Analysis of structures by displacement methods with computer solutions. Slope deflection and moment distribution methods. Derivation of stiffness matrices for two-dimensional frames. Introduction to commercial structural analysis software. Shear deformations.

**Requisites:** CIV ENGR 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR/ENVIR ST/G L E/GEOSCI 444 – PRACTICAL APPLICATIONS OF GPS SURVEYING**

2 credits.

Global positioning system surveying for field applications. Signals. Coordinate systems. Datums. Cartographic projections. Satellite orbits. Choosing hardware. Strategies for data collection and analysis. Assessing uncertainty. Geocoding satellite images. Integrating data with Geographic Information Systems. Emerging technologies.

**Requisites:** MATH 211, 217, 221, 275, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 445 – STEEL STRUCTURES I**

3 credits.

Design loads, codes, specifications and standards; philosophies of design; load and resistance factor design (LRFD); allowable stress design (ASD); properties and types of structural steel; residual stresses; behavior and LRFD design criteria for tension members, compression; laterally braced and unbraced beams; essentials of bolted and welded connections.

**Requisites:** CIV ENGR 340, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 447 – CONCRETE STRUCTURES I**

3 credits.

Behavior of reinforced concrete structural elements; concepts of design and proportioning sections for strength and serviceability; background of specification requirements; strength design applied to beams, columns, and members under combined axial load and bending; continuous beams.

**Requisites:** CIV ENGR 340, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 451 – ARCHITECTURAL DESIGN**

3 credits.

Introduction to building design, its methods, tools and processes and the interface with other professionals in building design and construction. Buildings as an integrated system of components, assemblies and sub-systems, including: structure, enclosure, internal finish and furnishing, circulation, conveyance and mechanical systems. Pragmatic design elements that make a project sustainable, energy efficient and comfortable, including; fenestration options, daylighting, passive heating and cooling, energy efficiency and other lower impact approaches identified in LEED standards.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR/ISYE/NE 460 – UNCERTAINTY ANALYSIS FOR ENGINEERS**

3 credits.

Introduction to approaches for quantifying uncertainty in engineering analyses. Both analytical and computational methods are demonstrated.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No**CIV ENGR/GE/GEOSCI/MSE 474 – ROCK MECHANICS**

3 credits.

Classification of rock masses, stress and strain in rock, linear and non-linear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications.

**Requisites:** E M A 201, PHYSICS 201, 207, or 247, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 489 – HONORS IN RESEARCH**

1-3 credits.

Undergrad honors research projects supervised by faculty members.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2010**CIV ENGR 491 – LEGAL ASPECTS OF ENGINEERING**

3 credits.

Legal principles and institutions germane to engineering practice; formation and performance of engineer-client and owner-contractor relationships; preparation of technical specifications; surety bonds and insurance; construction liens; contract administration; construction contract remedies; intellectual property of engineers; engineers' obligations to society and their fellow engineers.

**Requisites:** Senior standing or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR 492 – INTEGRATED PROJECT ESTIMATING AND SCHEDULING**

3 credits.

Principles of estimating and scheduling for the construction industry, engineer's preliminary and final estimates' quantity take offs and cost and duration determinations for major items related to a construction project; use manual and computer techniques.

**Requisites:** Junior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 494 – CIVIL AND ENVIRONMENTAL ENGINEERING DECISION MAKING**

3 credits.

Planning, designing, and managing civil and environmental engineering systems. Fundamentals of the systems approach; marginal analysis; optimization techniques; decision analysis; economic analysis; cost-effectiveness analysis. Case study applications.

**Requisites:** MATH 217, 221, 275, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 495 – SUSTAINABLE BUILDING AND MATERIALS**

3 credits.

Concepts of sustainability in Civil Engineering with an emphasis on construction materials. Introduction to life-cycle assessment approach to evaluating the impact of infrastructure development. Current sustainable practices in construction projects. Connecting values to clients, stakeholders, and societal needs. Sustainability rating programs, such as LEED, Envision, and INVEST.

**Requisites:** CIV ENGR 325, CIV ENGR/E M A/CIV ENGR 395, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CIV ENGR 496 – ELECTRICAL SYSTEMS FOR CONSTRUCTION**

3 credits.

Basic electricity, utility systems, standards and codes, electrical construction materials, branch circuit design, motor branch circuit design, feeder and service design, estimating and management concepts in electrical contracting, grounding, lighting, telecommunications.

**Requisites:** PHYSICS 202, 208, 248, graduate/professional standing, or member of engineering guest students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 497 – MECHANICAL SYSTEMS FOR CONSTRUCTION**

3 credits.

Introduction to building mechanical systems. Plumbing, heating, ventilation, air conditioning, fire protection, automation/controls and process systems. Introduction to mechanical systems design and cost estimating. Mechanical system management.

**Requisites:** PHYSICS 202, 208, 248, graduate/professional standing, or member of engineering guest students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 498 – CONSTRUCTION PROJECT MANAGEMENT**

3 credits.

Characteristics of Construction Industry; project organizations; the design and construction process; labor, material, and equipment utilization; cost estimation; construction pricing and contracting; construction planning; cost control, monitoring accounting; and management systems construction.

**Requisites:** Junior standing or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 500 – WATER CHEMISTRY**

3 credits.

Elements of fresh and marine water chemistry; acid-base, precipitation, complexation, oxidation-reduction, adsorption, and biochemical reactions in natural waters and water treatment processes.

**Requisites:** CHEM 104, 109, 116, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 501 – WATER ANALYSIS-INTERMEDIATE**

3 credits.

Principles and applications of chemical and instrumental methods for the chemical analysis of water.

**Requisites:** CHEM 104, 109, 116, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**CIV ENGR/E M A/M E 508 – COMPOSITE MATERIALS**

3 credits.

Physical properties and mechanical behavior of polymer, metal, ceramic, cementitious, cellulosic and biological composite systems; micro- and macro-mechanics; lamination and strength analyses; static and transient loading; fabrication; recycling; design; analytical-experimental correlation; applications.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 511 – MIXING AND TRANSPORT IN THE ENVIRONMENT**

3 credits.

Application of fluid mechanics to understand the mixing and transport of contaminants, pollutants, and other solutes in the environment. Introduction to chemical and biochemical transformation processes as well as boundary interactions at the air-water and sediment-water interfaces. Transport phenomena: diffusive processes, advective processes, turbulent diffusion, and shear flow dispersion. Introduction to both analytical and computational solutions with applications to mixing and transport in rivers, lakes, the atmosphere, and coastal waters.

**Requisites:** (CIV ENGR/G L E 291, COMP SCI 220, or E C E 203) and (CIV ENGR 310 or M E 363), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**CIV ENGR 514 – COASTAL ENGINEERING**

2-3 credits.

The effect of natural forces associated with storms, hurricanes, and water-level variations on the coastal zone, and efforts made to combat these forces. Wave and storm-surge prediction, the change of waves as they approach shore, and wave forces on the shore; shore erosion and littoral drift; nearshore pollution in lakes and oceans; harbor, breakwater, and revetment design.

**Requisites:** CIV ENGR 311, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CIV ENGR 515 – HYDROCLIMATOLOGY FOR WATER RESOURCES MANAGEMENT**

3 credits.

Introduction to various strategies for integrating climate science into water resources, specifically addressing climatic influences on hydrologic variables, the prospects for prediction, and the implications on water management and development. Consider both space and time variability of hydrological processes in the context of sub-seasonal, seasonal, and climate change time-scales.

**Requisites:** CIV ENGR 415 and (STAT 224, 311, or 324), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CIV ENGR/G L E 520 – REACTIVE PROCESSES FOR SUSTAINABLE ENERGY AND RESOURCE PRODUCTION**

3 credits.

Key scientific concepts related to fossil and renewable energy resources. Apply the fundamentals of thermodynamics and chemical kinetics at solid interfaces to better understand the science behind using fossil and renewable energy resources. Evaluate the impacts of existing and emerging energy technologies on the environment.

**Requisites:** Senior standing, (MATH 211, 217, 221, or 275), (CHEM 103, 104, or 109), and CIV ENGR 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CIV ENGR 522 – HAZARDOUS WASTE MANAGEMENT**

3 credits.

Environmental regulations, remediation site characterization, contaminant characterization, detailed engineering and management considerations related to the design and operation of hazardous waste remediation systems involving water pollution, air pollution, solid waste, and groundwater pollution.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 530 – SEEPAGE AND SLOPES**

3 credits.

Practical aspects of seepage effects and ground water flow. Stability of natural and man-made slopes under various loading conditions. Design and construction of earth dams and embankments. Flow net and its use; wells; filters; total and effective stress methods of slope analysis; selection of pertinent soil parameters.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CIV ENGR/G L E 532 – FOUNDATIONS**

3 credits.

Shallow and deep foundations. Analysis and design of footings, mats, piers and piles, and related fill and excavation operations. Consolidation settlement, time rate of settlement, stress distribution, elastic (immediate) settlement, load bearing capacity; methods to reduce settlements and increase shear strength; the selection of a foundation system.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR/G L E 535 – WIND ENERGY BALANCE-OF-PLANT DESIGN**

3 credits.

Wind Energy Development and Balance-of-Plant Design. Up-front coverage includes the science and mechanics of wind energy including turbine basics, wind resource assessment, energy production, and economic return. Balance-of-plant design aspects include site layout and micro-siting, foundation systems, collector systems and interconnection, site civil and electrical infrastructure, and structural tower analysis. Development includes environmental due diligence and permitting, stakeholder engagement, energy policy and markets, and levelized cost of energy (LCOE).

**Requisites:** PHYSICS 201, 207, 247, E M A 201, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CIV ENGR 545 – STEEL STRUCTURES II**

3 credits.

Composite construction; composite vs. non-composite behavior; shored vs. unshored construction; stability of frames; elastic analysis of frames including second order effects; strength of members subject to combined flexure and axial compression; plate girders; vertical flange buckling; flexural and shear strength; flexure and shear interaction; stiffener requirements.

**Requisites:** CIV ENGR 445, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 547 – CONCRETE STRUCTURES II**

3 credits.

Deflections under short duration and sustained loads; compression members with emphasis on stability and secondary bending moments; two-way slab systems; prestressed concrete including prestress losses; design of shear walls, special topics in strut and tie modelling, compression field theory and design for torsion may be covered; flexure analysis; design of sections; and shear strength.

**Requisites:** CIV ENGR 447, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR/ENVIR ST/LAND ARC 556 – REMOTE SENSING DIGITAL IMAGE PROCESSING**

3 credits.

Techniques of enhancement and quantification of remote sensing imagery. Emphasis on processing and analyzing data gathered by airborne and satellite sensors. Techniques to quantitatively analyze data from photography, electro-optical scanners, satellite systems, and radar and passive microwave systems. Applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR/A A E/ENVIR ST/URB R PL 561 – ENERGY MARKETS**

3 credits.

Energy resources are an essential element of the world's business, political, technical and environmental landscape. Analytic tools provided by the discipline of economics expands our understanding of this critical issue. Energy supply markets reviewed include both fossil fuels and renewable resources. Energy demand sectors include residential, commercial, industrial and transportation. Electricity represents an intermediate energy market. The interactions among these markets participants indicate how scarce resources are allocated among competing needs in the world economy.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**CIV ENGR 571 – URBAN TRANSPORTATION PLANNING**

3 credits.

Principles of planning, evaluation, selection, adoption, financing, and implementation of alternative urban transportation systems; formulation of community goals and objectives, inventory of existing conditions; transportation modeling--trip generation, distribution, modal choice, assignment, technological characteristics and operation of modern transit and other movement systems.

**Requisites:** CIV ENGR 370, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 572 – TRANSPORTATION OPERATIONS**

3 credits.

Introduction to assessment tools of transportation operations and fundamental concepts in flow theory, flow control, observation and measurement techniques, and scheduled transportation. Applied to various modes of transportation. Emphasis on logic rather than recipe-oriented practice.

**Requisites:** CIV ENGR 370 and (E C E 331, MATH/STAT/MATH 431, or STAT 311), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 573 – GEOMETRIC DESIGN OF TRANSPORT FACILITIES**

3 credits.

Problems in ground transportation facility design; generation, capacity, location and design; rural and urban at-grade intersection design; grade separations; interchanges; parking lots and terminals.

**Requisites:** CIV ENGR 370, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 574 – TRAFFIC CONTROL**

3 credits.

Traffic data collection studies; measures of effectiveness and evaluation of traffic system performance; design and application of traffic control devices; design of traffic signal systems; operational controls and traffic management strategies.

**Requisites:** CIV ENGR 370, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 575 – ADVANCED HIGHWAY MATERIALS AND CONSTRUCTION**

3 credits.

Soils, soil stabilization, aggregates, bituminous materials and mixtures, general highway materials and construction of rigid and flexible pavements.

**Requisites:** CIV ENGR/E M A/CIV ENGR 395, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**CIV ENGR 576 – ADVANCED PAVEMENT DESIGN**

3 credits.

Covers the principles of stress and strain analyses in typical highway pavement structures due to loading from traffic and climate. Also covers the most commonly used analysis and design procedures/software to determine thickness of pavement layers and prediction of performance.

**Requisites:** CIV ENGR/E M A/CIV ENGR 395, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 577 – TRAFFIC FLOW THEORY**

3 credits.

Comprehensive overview of vehicular traffic flow theory and its use in evaluating congestion and determining control strategies. Starting from the basic concepts defining traffic streams, existing theories are presented at different scales, including car-following (microsimulation) models, lane-changing models, cellular automata models, the kinematic wave model, and macroscopic/network fundamental diagram. Techniques for empirical analysis. Connected and automated vehicles.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CIV ENGR 578 – SENIOR CAPSTONE DESIGN**

4 credits.

The application of theoretically and academically acquired knowledge to a civil and environmental engineering problem in as near "real-world" as possible.

**Requisites:** CIV ENGR 414, 426, 427, 428, 442, 445, 447, 522, 573, 574, 576, CIV ENGR/G L E/CIV ENGR 530, or 532

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 579 – SEMINAR-TRANSPORTATION ENGINEERING**

1 credit.

Current problems and research developments in transportation, highways, traffic engineering, and transportation planning and systems analysis.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 609 – SPECIAL TOPICS IN WATER CHEMISTRY**

1-3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR/G L E 612 – ECOHYDROLOGY**

3 credits.

Mutual interactions between the hydrologic cycle and ecosystems, including hydrologic mechanisms that underlie ecological patterns and processes, movement of water and energy through the soil-plant-atmosphere continuum, application and development of models for simulating ecohydrologic processes, and case studies on ecohydrologic function and ecosystem services of varied environments.

**Requisites:** CIV ENGR 311, G L E/GEOSCI/G L E 627, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**CIV ENGR 618 – SPECIAL TOPICS IN HYDRAULICS AND FLUID MECHANICS**

1-3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**CIV ENGR 619 – SPECIAL TOPICS IN HYDROLOGY**

1-3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022



**CIV ENGR 621 – BIOLOGICAL TREATMENT PROCESS MODELING**

1 credit.

Modeling for wastewater treatment plant evaluation and design using a commercial modeling program. Focus on biological treatment processes and the kinetics of biological growth and substrate degradation. Set up and calibrate model, configure and size plant processes, and explore the impact of configuration and kinetic parameters on treatment efficiency. Evaluate impacts and tradeoffs for advanced treatment scenarios with regards to chemical use, energy needs, sludge production, and plant footprint.

**Requisites:** CIV ENGR 426, 721, or 821

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CIV ENGR/SOIL SCI 623 – MICROBIOLOGY OF WATERBORNE PATHOGENS AND INDICATOR ORGANISMS**

3 credits.

Source, environmental fate and transport of major groups of waterborne pathogens, including epidemiology and testing of associated indicator organism. Management and treatment technologies for prevention of pathogen transmission.

**Requisites:** CIV ENGR 322 or MICROBIO/SOIL SCI/MICROBIO 523 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**CIV ENGR 629 – SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING**

1-3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR/M&ENVTX/SOIL SCI 631 – TOXICANTS IN THE ENVIRONMENT: SOURCES, DISTRIBUTION, FATE, & EFFECTS**

3 credits.

Nature, sources, distribution, and fate of contaminants in air, water, soil, and food and potential for harmful exposure.

**Requisites:** (CHEM 104, 109, or 116) and (MATH 211, 217, 221, or 275) and PHYSICS (104, 202, 208, or 248)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 635 – REMEDIATION GEOTECHNICS**

3 credits.

Geotechnical practice for remediation of sites containing contaminated soil and groundwater is discussed. Topics include non-invasive and invasive subsurface exploration techniques, methods to monitor for the presence of contaminants in the saturated and unsaturated zones, and geotechnically-oriented remedial action technologies.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 639 – SPECIAL TOPICS IN GEOTECHNICAL ENGINEERING**

1-4 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 649 – SPECIAL TOPICS IN STRUCTURAL ENGINEERING**

1-3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 669 – SPECIAL TOPICS IN CONSTRUCTION ENGINEERING AND MANAGEMENT**

1-4 credits.

Topics vary.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 678 – ADVANCED TRAFFIC MODELING AND COMPUTER SIMULATION**

3 credits.

Theoretical and practical perspectives of traffic flow modeling with a focus on micro-simulation. Simulation software, such as CORSIM, VISSIM, and PARAMICS. Develop and calibrate a set of base models of existing conditions, extend the models to include design alternatives (generally using traffic demands projected for future years), and then generate conclusions on the basis of the modeling results.

**Requisites:** CIV ENGR 370, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 679 – SPECIAL TOPICS IN TRANSPORTATION AND CITY PLANNING**

3 credits.

Topics vary.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR/PUB AFFR 694 – MANAGEMENT OF CIVIL INFRASTRUCTURE SYSTEMS**

3 credits.

Comprehensive systems approach to civil infrastructure and asset management with emphasis on transportation facilities. Social, political, economic factors that influence transportation planning, design, construction, maintenance and operation. Needs assessment, information management, performance measurement, life cycle cost and benefits analysis, prioritization and optimization, budgeting and finance.

**Requisites:** CIV ENGR 494, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CIV ENGR 699 – INDEPENDENT STUDY**

1-9 credits.

Under faculty supervision.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 700 – CHEMISTRY OF NATURAL WATERS**

3 credits.

Application of chemical principles to cycling of important elements in natural waters; mineral weathering, cycles of carbon, nitrogen, phosphorus, silicon, sulfur, and minor elements in natural waters; relationships of atmospheric chemistry to natural waters.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CIV ENGR/ATM OCN 701 – THE CHEMISTRY OF AIR POLLUTION**

2 credits.

Covers background and modern research methods for the application of chemical analysis tools to understanding of the origin, composition, and the chemical transformations of pollutants that occur in the atmosphere. Emphasis will be directed at the pollutants impacting human health, climate change, and ecosystem degradation. Approximately half of the course materials will be taken from the scientific literature and will provide the opportunity to advance skills in the critical reading of journal articles. The course is directed at graduate students conducting research and interested in air pollution and environmental chemistry. Gain experiences in presenting scientific research methods and results related to course materials.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CIV ENGR 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CIV ENGR 703 – ENVIRONMENTAL GEOCHEMISTRY**

3 credits.

A quantitative treatment of chemical and biological processes controlling the speciation and partitioning of inorganic compounds in natural waters. Particular attention will be paid to heterogeneous reaction mechanisms, and kinetics controlling inorganic compounds in aqueous environments. Discuss in-situ techniques for measurement of environmental reactions. For those interested in environmental chemistry, chemistry, limnology, geology, environmental microbiology, soil science, and environmental modeling.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 704 – ENVIRONMENTAL CHEMICAL KINETICS**

3 credits.

Fundamental molecular processes that govern the fate and transformation of organic contaminants in natural environmental systems and engineered treatment processes. Emphasizes the kinetics describing these processes and focuses on transformation mechanisms of organic contaminants in aquatic systems. Specific topics include partitioning between air, water, and solids; chemical kinetics; substitution, hydrolysis, and redox reactions; oxidation reactions encountered in ozone and chlorine-based disinfection systems; and photochemical and biological transformations. Knowledge of water chemistry [such as CIV ENGR 500] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**CIV ENGR 716 – STATISTICAL MODELLING OF HYDROLOGIC SYSTEMS**

3 credits.

Real world applications of probability and statistics to the analysis and modeling of problems in surface and groundwater hydrology. Basic knowledge of probability and statistics [such as STAT 311] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2018**CIV ENGR/ENVIR ST/URB R PL 717 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR I**

1 credit.

The first of two seminars for planning the activities of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR/ENVIR ST/URB R PL 718 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR II**

2 credits.

The second of two seminars for planning the field work, analysis, and reporting of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR/ENVIR ST/URB R PL 719 – WATER RESOURCES MANAGEMENT SUMMER PRACTICUM**

4 credits.

Interdisciplinary team of students and staff working with agency personnel, citizen groups, and/or private sector representatives on the analysis of a contemporary, problem-oriented water resource issue. Physical, biological, economic and social aspects of the issue analyzed. Comprehensive written report results, practicum's findings and management recommendations.

**Requisites:** ENVIR ST/CIV ENGR/URB R PL/CIV ENGR/ENVIR ST 718**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**CIV ENGR 721 – BIOLOGICAL PRINCIPLES OF ENVIRONMENTAL ENGINEERING**

3 credits.

Biological principles important to diagnosing and controlling pollution through environmental engineering applications such as fate and transport of contaminants in the environment, eutrophication, water treatment for human consumption, biological waste treatment for pollution control and bioenergy generation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 722 – CHEMICAL PRINCIPLES OF ENVIRONMENTAL ENGINEERING**

3 credits.

Principles of general, physical, equilibrium, colloid and biochemistry applied to environmental engineering processes such as evaluating environmental quality and treating water, air and soil to meet environmental standards.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**CIV ENGR 723 – ENERGY PRINCIPLES OF ENVIRONMENTAL ENGINEERING**

3 credits.

Principles of energy applied to environmental engineering such as energy resources, sustainability concerns, work and power, thermodynamics, system and process efficiencies, energy production from waste, heat transfer, and heating and cooling of systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CIV ENGR 729 – ENVIRONMENTAL SUSTAINABILITY TOOLS**

3 credits.

Environmental impact must be quantified systematically and rigorously in order to inform decision making, process improvement, and policy. Life cycle assessment will be utilized in a project-based framework to evaluate the environmental impacts of products and process across multiple environmental impact categories.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CIV ENGR/G L E 730 – ENGINEERING PROPERTIES OF SOILS**

3 credits.

Determination and interpretation of soil properties for engineering purposes; physio-chemical properties of soil-water systems, permeability and capillarity, compression characteristics of soils, measurement of soil properties in the triaxial test, properties of frozen soils and permafrost.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CIV ENGR/G L E 732 – UNSATURATED SOIL GEOENGINEERING**

3 credits.

Engineering principles of unsaturated soils as they apply to geotechnical and geoenvironmental systems. Effect of soil water suction and stress on hydraulic conductivity, shear strength, and compressibility of soils in the context of geoenvironmental problems of flow and stability. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] is required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR/G L E 733 – PHYSICOCHEMICAL BASIS OF SOIL BEHAVIOR**

3 credits.

Applications of physiochemical, mineralogical and environmental considerations to the engineering behavior of soils. Soil composition, formation, fabric, pore fluid chemistry and interaction of phases. The particulate nature of soils and the fabric-engineering property (volume change, strength, deformation and conduction) relationships. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] is required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CIV ENGR/G L E 735 – SOIL DYNAMICS**

3 credits.

Geotechnical considerations of earthquake engineering and foundation vibrations. Seismic surveying; ground motion during earthquakes; determination of soil properties for ground response analysis; dynamic properties of soils; soil structure interaction effects; soil liquefaction; dynamic analysis of earth dams; settlements resulting from earthquakes, lateral earth pressures during earthquakes; foundation vibrations. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] and Foundations [such as G L E 452 or CIV ENGR/G L E 532] is required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CIV ENGR 744 – STRUCTURAL DYNAMICS AND EARTHQUAKE ENGINEERING**

4 credits.

Dynamic analysis and behavior of structures; basic principles and application of engineering seismology; determination of earthquake-induced loads for earthquake-resistant design; and analysis and design of reinforced concrete and steel buildings subjected to ground motion. Knowledge of analysis and design of reinforced concrete and structural steel buildings [such as CIV ENGR 440, 445, and 447] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CIV ENGR 749 – SPECIAL TOPICS IN STRUCTURAL ENGINEERING**

1-4 credits.

Advanced topics of special interest to graduate students in structural engineering.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**CIV ENGR/ENVIR ST 772 – PRACTICUM IN TRANSPORTATION MANAGEMENT AND POLICY**

3 credits.

Integrative capstone course in transportation management and policy. Interdisciplinary team experience in the application of theoretical knowledge and analytical tools for developing policy and making management decisions on "real-world" problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**CIV ENGR/E M A/M E 775 – TURBULENT HEAT AND MOMENTUM TRANSFER**

3 credits.

Stochastic methods in turbulent heat and momentum transfer; fully developed turbulence; numerical methods including model applications to boundary layers, reacting flows, mass transfer, and unsteady flows; linear and non-linear stability and transition; emphasis on applications of interest to Mechanical, Aerospace, and Environmental Engineers. Knowledge of fluid mechanics [such as M E 363 or CBE 320] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR 790 – MASTER'S RESEARCH OR THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in a Civil and Environmental Engineering or Environmental Chemistry and Technology graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CIV ENGR 820 – HYDRAULICS AND APPLIED FLUID MECHANICS FOR ENVIRONMENTAL ENGINEERS**

3 credits.

Principles of hydraulics and fluid mechanics applied to environmental engineering systems that convey, control, and measure the flow of liquids, solid-liquid slurries, and gases.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2021**CIV ENGR 821 – ENVIRONMENTAL ENGINEERING: BIOLOGICAL TREATMENT PROCESSES**

3-4 credits.

Advanced theory and applications of biological systems for the treatment of wastes; lab techniques to assess treatability and to provide design parameters. Introductory knowledge of Environmental Engineering [such as CIV ENGR 320] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CIV ENGR 822 – ENVIRONMENTAL ENGINEERING: PHYSICAL/CHEMICAL TREATMENT PROCESS**

3-4 credits.

Advanced theory and applications of chemical and physical-chemical processes for the treatment of water and wastewater; lab techniques to assess design requirements and treatability. Introductory knowledge of Environmental Engineering [such as CIV ENGR 320] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CIV ENGR 823 – ENVIRONMENTAL ENGINEERING DESIGN PROJECT**

3 credits.

Engineering design project applied to environmental engineering solutions involving environmental chemistry, environmental quality, physical-chemical treatment processes, biological treatment processes, solid and hazardous waste engineering, energy, resource recovery, economic analysis, hydrology, and/or hydraulics and applied fluid mechanics.

**Requisites:** Declared in Civil and Environmental Engineering MS, Environmental Chemistry and Technology MS, or Civil and Environmental Engineering: Environmental Engineering ME**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**CIV ENGR 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Civil and Environmental Engineering PHD or Environmental Chemistry and Technology PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CIV ENGR 909 – GRADUATE SEMINAR - ENVIRONMENTAL CHEMISTRY & TECHNOLOGY**

1 credit.

Current research in environmental chemistry and technology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CIV ENGR/ATM OCN/BOTANY/ENVIR ST/GEOSCI/ZOOLOGY 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**CIV ENGR 919 – SEMINAR-HYDRAULIC ENGINEERING AND FLUID MECHANICS**

1 credit.

Current research and review of literature in theoretical and applied fluid mechanics and hydraulic engineering.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 929 – SEMINAR-ENVIRONMENTAL ENGINEERING**

1 credit.

Current research and literature on water, wastewater, water pollution control, solid wastes engineering and management.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 939 – GEOTECHNICAL ENGINEERING SEMINAR**

1 credit.

Geotechnical analysis, design, and construction.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 949 – SEMINAR-STRUCTURAL ENGINEERING**

1 credit.

Structural analysis, design, and construction.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR/ENVIR ST 970 – COLLOQUIUM IN TRANSPORTATION MANAGEMENT AND POLICY**

1 credit.

Current issues, case studies, research, and literature dealing with transportation management and policy development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**CIV ENGR 990 – THESIS**

1-12 credits.

Under faculty supervision.

**Requisites:** Declared in Civil and Environmental Engineering PHD or Environmental Chemistry and Technology PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CIV ENGR 999 – ADVANCED INDEPENDENT STUDY**

1-9 credits.

Under faculty supervision.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## CIVIL SOCIETY AND COMMUNITY STUDIES (CSCS)

**CSCS 125 – COMMUNITY AND SOCIAL CHANGE**

3 credits.

This course examines contemporary issues with an emphasis on the role that individuals and communities play in achieving positive social change. Through active learning, students will develop the mindsets and communication skills necessary to work in diverse community contexts. Specific themes may shift based on current events, but often include education reform, racial justice, health equity, alternative economies, food systems, and sustainability.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CSCS 130 – COMMUNITY NEWSWRITING**

3 credits.

Newsriting of interest to individuals, families, and communities.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Summer 2022



### **CSCS 254 – COMMUNITY & NONPROFIT LEADERSHIP SYMPOSIUM**

1 credit.

Provides detailed examination of careers in Human Ecology and the fields of community and nonprofit leadership. High-level leaders from leading community organizations, nonprofits, community health institutions, family support agencies, NGO's, and public-sector entities will present as guest speakers and panel members.

**Requisites:** None

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

### **CSCS 299 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **CSCS 300 – NONPROFIT SECTOR: OVERVIEW AND FOUNDATIONS**

3 credits.

Provide learners with the concepts and tools to analyze the broad environment in which nonprofits operate and assess the impact of this environment at the community and individual organizational level.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CSCS 301 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-6 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in community and nonprofit leadership related fields. Course is intended for juniors and seniors in Community and Nonprofit Leadership.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

### **CSCS/AMER IND 330 – AMERICAN INDIAN COMMUNITIES: SOVEREIGNTY, STRUGGLES, AND SUCCESSES**

3 credits.

Learn about contemporary Native communities, both domestically and globally, through a carefully curated selection of readings, podcasts, and videos from Indigenous scholars, community members, knowledge holders, and activists. Offers a broad historical overview of Native American communities in the United States that illustrates the historical trajectory from early colonization and dispossession through self-determination and the recognition of tribal sovereignty in action by local, state, and federal governments.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CSCS 335 – COMMUNICATING WITH KEY AUDIENCES**

3 credits.

Comprehensive communication strategies for individuals, families, and communities.

**Requisites:** Sophomore standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CSCS 345 – EVALUATION AND PLANNING FOR COMMUNITY AND NONPROFIT ORGANIZATIONS**

3 credits.

An applied introduction to planning and evaluation for nonprofit and community-based organizations. Students will develop skills that can be utilized in both existing and prospective organization-level strategic planning, individual program-level planning, as well as multi-organization planning contexts. Students will also learn how to think of evaluation as a practice, a way of thinking, and as a process integral to and interdependent with strategic and program planning.

**Requisites:** CSCS 300

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CSCS 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

Requisite varies by topic

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CSCS 400 – PHILANTHROPY AND CIVIC ENGAGEMENT**

3 credits.

Explores philanthropy and civic engagement through giving time, money and effort to a public purpose. Students will learn the philanthropic process including creating a giving plan, as well as exploring strategic and creative ways to give that promote civil society and engagement. Students will develop plans for assessment and evaluation of philanthropic giving.

**Requisites:** Sophomore standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**CSCS 410 – HUMAN TRAFFICKING: GLOBAL AND LOCAL PERSPECTIVES**

3 credits.

An interdisciplinary approach to understand human trafficking as a complex social phenomenon. The topic of human trafficking is analyzed through readings and a robust set of case studies, as part of a spectrum of interrelated violence, exploitation and systemic inequities influenced by various social determinants rooted in gender, power, class, sex, race, opportunity, education, culture, politics, access, and sexual orientation among other factors. Advocacy training will focus on commercial sexual exploitation and human trafficking with attention to supply and demand issues, vulnerability factors, immigration and law enforcement policies, and the overall impact on survivors' rights, health, and their status in society.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CSCS/CURRIC 427 – METHODS OF TEACHING FAMILY AND CONSUMER EDUCATION**

3 credits.

Theory and principles of teaching and learning in family and consumer education.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2016**CSCS/CURRIC 428 – PROGRAM PLANNING IN FAMILY AND CONSUMER EDUCATION**

3 credits.

Theory and processes of program planning for formal and informal educational settings; relation of vocational education to secondary, adult, and continuing education programs.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Fall 2018**CSCS 430 – FUNDRAISING & DEVELOPMENT FOR NONPROFIT ORGANIZATIONS**

3 credits.

Explores the philosophy of fundraising and development, its bearing on the nonprofit sector, as well as the practical strategies employed by nonprofits in their fundraising efforts to secure time, talent and treasure for sustaining their work. Nonprofit sector organizations (NPO) seek to thrive in their efforts to have a positive impact in bringing social change - to individuals, families, and communities and, indeed, the world. To sustain these noble efforts, these dynamic organizations must attract and garner the time, talent and treasure necessary to develop and grow. Fundraising programs are a significant part of a NPO's work in bringing resources to support their fund development/institutional advancement. Development is a mindset - a way to frame the NPO's thinking and behaviors in providing a comprehensive approach to broad mission support.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CSCS 455 – ENTREPRENEURIALISM AND SOCIETY**

3 credits.

Explores entrepreneurialism in nonprofits, business, government, and arts and humanities contexts. With a broad approach of ideas, readings, and lectures, students will understand the ever-changing role that entrepreneurs play and contribute to society.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**CSCS 460 – CIVIL SOCIETY AND COMMUNITY LEADERSHIP**

3 credits.

Provides opportunities for learning about some of the "nuts and bolts" of nonprofit organizations. Through studying high-impact organizations, interacting with local experts, and through an independent investigation of the work of a local nonprofit organization, students have opportunities for developing uniquely tailored understandings and skills for nonprofit leadership.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Fall 2021**CSCS 470 – THE HUMAN RIGHTS OF CHILDREN AND YOUTH: GLOBAL AND LOCAL PERSPECTIVES**

3 credits.

Human rights precepts, policies and frameworks for change in governments and civil society. Convention of the Rights of the Child (CRC), the principal human rights convention related to children, and other human rights policies related to children and young people. Critically analyze the CRC and access information from the Reports of the Committee on the Rights of the Child. Legal and policy frameworks which address the needs of children in adversity internationally. Review and develop case studies from around the world and from the United States on child rights topics, including a statement of intention and profiles of relevant research, advocacy, or service organizations.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

### **CSCS 500 – GLOBAL HEALTH AND COMMUNITIES: FROM RESEARCH TO PRAXIS**

3 credits.

Explores global health and well-being from a community perspective and through the holistic lens of human ecology. Respectful community-engagement, evidence-based practice, and making the local to global connection are key themes. Almost everything we do has an impact on our own health and that of our communities and the world. Prepares students for community-oriented global health engagement. Consider the nature of community and different types of communities, both locally and globally. Reflect on experiences in communities where you have lived or called home. Review the concept of health and well-being, and evidence-based practice. Learn basic principles of asset-based participatory community research and study, compare and contrast case examples from around the world.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **CSCS 501 – SPECIAL TOPICS**

1-3 credits.

Specialized subject matter of current interest to undergraduate and graduate students. Requisite varies by topic

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **CSCS 560 – COMMUNITY LEADERSHIP**

3 credits.

Explores community building and community action strategies for renewing fragmented connections in today's localities. Builds knowledge and skills for participation and leadership at team and multi-stakeholder community levels in the context of nonprofit organization work. Requires 5 hours of service learning.

**Requisites:** Junior standing and CSCS 300

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **CSCS 570 – COMMUNITY BASED RESEARCH AND EVALUATION**

3 credits.

Theoretical, critical, and analytical understanding and application of the conscious and systematic use of data, inquiry and analysis for community, organization and program diagnosis, intervention and evaluation in various community-based and nonprofit organizations.

**Requisites:** Junior standing, satisfied Quantitative Reasoning (QR) A requirement, and CSCS 300

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CSCS 600 – COMMUNITY ISSUES AND ACTION CAPSTONE**

3 credits.

Designed to demonstrate your accumulated training in community and non-profit leadership in a semester long project done in collaboration with a community partner. The course asks how we can better conceptualize social justice and community issues from a human ecology perspective, while also learning from our own practice and experience working with nonprofit and community based organizations. This course provides students with both a critical learning experience that combines both classroom and community based learning. The course requires 28 hours of fieldwork in community settings, in addition to class sessions. It is expected that students will complete the ethnic studies requirement prior to enrolling in this course.

**Requisites:** Senior standing and CSCS 345

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CSCS 601 – INTERNSHIP**

1-6 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in community and nonprofit leadership related fields. Course intended for juniors and seniors in Community and Nonprofit Leadership.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **CSCS 675 – GENERAL TOPICS**

2-3 credits.

Specialized subject matter of current interest to graduate students.

Requisite varies by topic

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **CSCS 680 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for seniors completing theses for Human Ecology honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2014

### **CSCS 690 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**CSCS 699 – INDEPENDENT STUDY**

1-4 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CSCS/M H R 742 – NONPROFIT BOARD LEADERSHIP DEVELOPMENT I**

2 credits.

Part one of a two part course sequence. Develop a commitment to community and civic engagement through volunteer leadership of nonprofit organizations in Madison/Dane County. Serve on the boards of nonprofits (in a non-voting capacity) and complete an independent governance project.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CSCS/M H R 743 – NONPROFIT BOARD LEADERSHIP DEVELOPMENT II**

1 credit.

Part two of a two part course sequence. Continued development of a commitment to community and civic engagement through volunteer leadership of nonprofit organizations in Madison/Dane County. Continued service on the boards of nonprofits (in a non-voting capacity) and completion of an independent governance project.

**Requisites:** M H R/CSCS/M H R 742

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CSCS 775 – BUILDING CIVIL SOCIETY**

3 credits.

Consistent with the values of civil society, emphasizes engagement, debate, collegiality, personal discernment, and expression. Reflect on how developing academics and practitioners can use frameworks and practices of civil society to further professional goals and civic contributions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CSCS 785 – CIVIC DEVELOPMENT ACROSS THE LIFESPAN**

3 credits.

Focus on ways in which people develop identities and commitments as members of cultural and community groups and how they exercise rights and assume responsibilities in those contexts. An ecological approach to civic development - considering characteristics of persons (age, race, ethnicity, gender, sexual orientation, culture) and the opportunities, structural impediments, and challenges of social and institutional contexts for different groups. Major themes are people's collective agency in working for social change and how engaging in civic work promotes well-being. Designed to encourage a collaborative approach to learning and helps students to articulate their scholarship based on their passions for social justice and to enable students to make their work accessible to different scholarly and public audiences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CSCS 795 – COMMUNITY POWER AND COLLECTIVE ACTION**

3 credits.

Enhance students' collective ability to identify, describe, and analyze power and empowerment within communities and social, economic, and political systems. This will enable us to more effectively and intentionally situate our praxis with regard to power and collective action. The seminar therefore centers on inquiries into the roles that power plays in collective action for community change and improvement, as well as the roles that it often plays in hindering such efforts and maintaining the status quo or defending elite interests.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CSCS 801 – SPECIAL TOPICS IN CIVIL SOCIETY AND COMMUNITY RESEARCH**

1-3 credits.

Special topics in Civil Society and Community Research at the Master's and Doctoral levels. Subject matter varies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

### **CSCS 811 – COMMUNITY-BASED RESEARCH: THEORY AND PRACTICE**

3 credits.

An interdisciplinary, introduction to community-based research. Designed to be a co-exploration by the students and instructor of different community-based, community-engaged, and action-oriented research approaches and methods as utilized in a variety of disciplines. In addition, students will have the opportunity to apply what they are learning through participation in community-based research (CBR) projects developed collaboratively with a local community partner.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CSCS 812 – MIXED-METHODS IN COMMUNITY-BASED RESEARCH**

3 credits.

Applied, methodologically focused seminar that aims to develop capacities for action-oriented mixed-methods research design, as well as basic understanding of an array of methodological tools. Readings, discussions, assignments, and class projects are all oriented toward developing this capacity and understanding. Students in this course will work on an action-oriented research project that is a continuation from CSCS 811.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CSCS 813 – TRANSFORMATIVE EVALUATION IN PRACTICE**

3 credits.

Prepares students to develop, conduct and lead a participatory program evaluation using a transformative lens. Emphasizes collaborative strategies that build evaluation capacity and improve the use of evaluation findings. Students will build knowledge and skills in evaluation and apply them through projects with institutions (e.g. community organizations, voluntary associations or foundations) involved in creating a civil and just society. Topics include but are not limited to professional standards and ethical practice, understanding context and engaging stakeholders, the role of power in evaluation, evaluation theory, mixed methods designs, developmental and collective approaches to evaluation, and systems thinking.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CSCS 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **CSCS 999 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **CLASSICS (CLASSICS)**

### **CLASSICS 100 – LEGACY OF GREECE AND ROME IN MODERN CULTURE**

3 credits.

Explores the legacy of ancient Greek and Roman Civilization in modern culture. Reflect on the roots of western civilization and understand and interpret reflections of antiquity in today's society.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CLASSICS 101 – TOPICS IN CLASSICAL AND ANCIENT NEAR EASTERN STUDIES**

3 credits.

An introduction to the literature, history, and culture of Greece, Rome, and the Ancient Near East. Topics vary.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **CLASSICS/HISTORY 110 – THE ANCIENT MEDITERRANEAN**

4 credits.

An examination of the evolution of the human community in the Mediterranean Basin, from the beginning of the earliest civilizations in the Near East (3,000 B.C.E.) until the collapse of the Roman Empire in the West (500 C.E.).

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CLASSICS 150 – ANCIENT GREEK AND ROMAN MONSTERS**

3 credits.

Ancient monsters were forces of chaos that threatened the natural order of the universe: they had to be contained, banished to the edges of the world or destroyed. But the Greeks and Romans also believed them to be magical beings that held the promise of special knowledge – of the past, of dangers to be faced, of musical arts – or which, like the Sphinx, possessed an enigmatic intelligence capable of fooling all but the most cunning of mortals. Investigate these contrasting aspects of ancient monsters, drawing directly on texts (in translation) and works of art through which the Greeks and Romans explored the monstrous and its place in their world. Compare ancient representations with those in modern artistic media – comics, games, stories and movies – considering both how our notions of the monstrous are influenced by or contrast with those of our ancient predecessors, and how our very identities are created by and enacted through our depictions of monsters.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CLASSICS 205 – GREEK AND LATIN ORIGINS OF MEDICAL TERMS**

3 credits.

Discover the elements of Latin and Greek that are most commonly used in modern medicine. Learn a great deal about the cultural influences that lie behind the linguistic developments, and explore some of the striking contrasts between ancient and modern medicine. No prior knowledge of either language is needed.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CLASSICS 206 – CLASSICAL INFLUENCES ON WESTERN ART AND SCIENCE**

3 credits.

Explores the legacy of ancient Greek, Roman, and Near Eastern art and science in later historical periods of Western culture. Identify, analyze and critique the roots of western culture and to understand and interpret how classical cultures influence global arts and sciences past and present.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**CLASSICS/JEWISH/LITTRANS/RELIG ST 227 – INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)**

4 credits.

Introduction to the text, development, history, and social context of the Hebrew Bible/Old Testament. Covers the Torah (Pentateuch), Neviim (Former and Latter Prophets), and Ketuvim (Writings), and provides a brief introduction to early Jewish literature (Pseudepigrapha/Apocrypha). Discusses various methods of analysis and theories of composition. Addresses major theological claims made of the text by Jewish and Christian communities. Explores contextualized interpretations in the ancient and modern day.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CLASSICS/JEWISH 241 – INTRODUCTION TO BIBLICAL ARCHAEOLOGY**

4 credits.

An overview of archaeology and its relationship to understanding the biblical world.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**CLASSICS 270 – CLASSICAL MYTHOLOGY**

3 credits.

Classical myths and their influence on later literature and art.

**Requisites:** Not open to students with credit for CLASSICS 370 prior to Fall 2023**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CLASSICS/ART HIST 300 – THE ART AND ARCHAEOLOGY OF ANCIENT GREECE**

3-4 credits.

Explores the art and archaeology of ancient Greece from the Bronze Age through the Hellenistic period.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



### **CLASSICS/ART HIST 304 – THE ART AND ARCHAEOLOGY OF ANCIENT ROME**

3-4 credits.

Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CLASSICS 308 – SEX AND VIOLENCE IN THE ANCIENT NEAR EAST**

3 credits.

Examines the intersections of sex and violence in biblical and related literature. Read through a variety of lenses, including feminist interpretation, queer theory, and post-colonial theory. Consider how, why, and for whom texts depicting gender violence worked in the ancient world. Explore the reception of such texts in art, fiction, and film and their impact on modern society.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CLASSICS 320 – THE GREEKS**

3 credits.

Greek literature in translation with emphasis on its social background.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CLASSICS 321 – THE EGYPTIANS: HISTORY, SOCIETY, AND LITERATURE**

3 credits.

An introduction to the study of Ancient Egypt, analyzing its political clout through two millennia of history, its society and economy, its variegated religious systems, the art and literature it produced, and its reception in the modern period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CLASSICS 322 – THE ROMANS**

3 credits.

Latin literature in translation with emphasis on its social background.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CLASSICS/JEWISH/RELIG ST 323 – THE BIBLE AND FILM: LITERATURE AND MEDIA**

3 credits.

An introduction to the study of the Bible as literature and of biblical reception in the medium of film, from early Hollywood to the present day. Explores the way in which the Bible (including both Hebrew and Greek Testaments), one of the foundational literary corpora of American society, has been interpreted, reinterpreted, and misinterpreted through the medium of film over the past century. We will begin each segment of the course by reading portions of the biblical text that have experienced significant interpretation, in order to understand the literary text that has been received in film. How beholden are filmmakers to the interpretations of communities that view these texts as authoritative, and where are they free to depart from their sources? Is it possible to "translate" biblical narratives into film without losing something in the translation? These questions will focus our study on ways the literature has been interpreted in this new medium.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **CLASSICS 330 – ANCIENT EPIC**

3 credits.

Introduces the epic poetry of Greece and Rome, with texts selected from Homer's Iliad and Odyssey, Apollonius' Argonautica, Virgil's Aeneid, Ovid's Metamorphoses, and Lucan's Civil War. Explores important themes of epic literature both as they are developed within each text and as they evolve from the Greek Archaic to the Hellenistic age, and eventually to Augustan Rome. Also explores the influence of ancient epic on literature from the middle ages to the modern period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**CLASSICS/HEBR-BIB/JEWISH/LITTRANS/RELIG ST 332 – PROPHETS OF THE BIBLE**

4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English).

**Requisites:** CLASSICS/JEWISH/LITTRANS/RELIG ST/CLASSICS/JEWISH/LITTRANS 227 or Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CLASSICS/JEWISH/RELIG ST 335 – KING DAVID IN HISTORY AND TRADITION**

3 credits.

An exploration of the literary and historical aspects of the text of 1-2 Samuel + 1 Kings 1-2; the history and archaeology of Jerusalem during the tenth century B.C.E.; and the varieties of ways in which the figure of King David has been received in subsequent religious and secular literature, visual art, music, television, and cinema.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CLASSICS 340 – CONSPIRACY IN THE ANCIENT AND MODERN WORLDS**

3 credits.

Interrogates the phenomenon and notion of "conspiracy" within the political, social, and religious spheres of the ancient Roman world. Explores the structure of the traditional Roman household, including the preeminence of the paterfamilias and the challenges that women, children, and/or slaves pose to his notional "tyranny". Considers a number of prominent religions that came into conflict with Roman authorities - especially the mystery cults surrounding Bacchus as well as early Christianity. Apply insights from the ancient world to the modern one in our consideration of conspiracies such as the Salem Witch Trials, the Red Scare of the '50s, the Kennedy Assassination, and the Watergate Conspiracy.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**CLASSICS/JEWISH/RELIG ST 346 – JEWISH LITERATURE OF THE GRECO-ROMAN PERIOD**

3 credits.

Jewish literature from 350 BCE to 150 CE. The Greek and Hebrew sources include stories, religious poetry, wisdom books and apocalyptic texts.

Readings (in translation) from the Apocrypha, Pseudepigrapha, and the Dead Sea Scrolls in their historical, cultural and literary setting.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**CLASSICS/GEN&WS 351 – WOMEN AND GENDER IN THE CLASSICAL WORLD**

3-4 credits.

Constructions of gender and sexuality in the classical world through art, literature and archaeology.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CLASSICS/GEN&WS 361 – SEX AND POWER IN GREECE AND ROME**

3 credits.

Sex as a source of domination and liberation in Ancient Greek and Roman literature and modern European and North American theory and practice, including questions of sexual orientation, gender identity, violence, and self-realization.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CLASSICS/HISTORY/POLI SCI 362 – ATHENIAN DEMOCRACY**

3 credits.

Explores key issues in the ideology and practice of Athenian democracy. Examines democratic values, institutions, rhetoric, and sociology in order to provide the basic tools to understand democracy in its ancient context. Engages with a variety of source material (literary, archaeological, epigraphic) in order to develop multiple skills of interpretation. Some questions examined include: What are the key features of Athenian democracy, how did it change over time, and how did it differ from modern democracy? How did the Athenians justify and critique this political system? How did they reconcile citizen egalitarianism with social inequalities of wealth, gender, and status? To what extent were women, foreigners, slaves, or the poor included or excluded from politics? Was Athenian democracy a robust political system or a system in crisis?

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**CLASSICS 371 – TOPICS IN GREEK CULTURE**

1-3 credits.

Selected aspects of Greek culture (e.g., sports, women, the family, warfare), with emphasis on literary remains.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**CLASSICS 372 – TOPICS IN ROMAN CULTURE**

1-3 credits.

Selected aspects of Roman culture (e.g., sports, women, the family, warfare), with emphasis placed on literary remains.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**CLASSICS 373 – TOPICS IN CLASSICAL CULTURE**

1-3 credits.

Selected aspects of Classical culture (e.g., sports, women, the family, warfare), with emphasis on literary remains.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CLASSICS 420 – ANCIENT TEXTS, MODERN CONTEXTS**

3 credits.

What does the Trojan War have to do with Vietnam? What prompts the wives and mothers of classical Athens and the South side of Chicago to stage a sex strike? Explores how postclassical and contemporary writers, directors, thinkers and artists have read, appropriated, translated, reimagined and recontextualized classical literature. Through close textual readings, examine the surprising and original ways, and the reasons behind them, modern writers and artists have reread some of the major classical texts, including epic, lyric and drama, to give expression to modern experiences.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**CLASSICS 430 – TOPICS IN CLASSICAL ARCHAEOLOGY**

3 credits.

Explores topics in the archaeology of ancient Greece and Rome, such as the Seven Wonders of the Ancient World, the archaeology of Greek and Roman religion, or Late Antique Palaces.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**CLASSICS/JEWISH 451 – BIBLICAL ARCHAEOLOGY**

3 credits.

An examination of current problems, methods, and trends in archaeological research in the lands of the Bible.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018

**CLASSICS/ENVIR ST 488 – GREEKS, ROMANS AND THE NATURAL ENVIRONMENT**

3 credits.

Examine ways in which the ancient Greeks and Romans interacted with their Mediterranean environments and the various conceptions of the natural world that they developed in poetry, prose and visual art. Explore a number of general topics that will underpin the course as a whole: the characteristics of the Mediterranean environment, the effect of nature on humankind, and the impact of humankind on nature. Study aspects of Greek and Roman engagements with nature, such as agriculture, hunting, sacrifice, the contested relationship between the natural and the civilized, and representations of human beings using terms drawn from the natural world ("bears" of Artemis, cannibalistic "wolves"). Consider how these aspects of the ancient world relate to modern treatments of such themes. (NB: All Greek and Latin texts will be read in English translation.)

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**CLASSICS/HISTORY/RELIG ST 517 – RELIGIONS OF THE ANCIENT MEDITERRANEAN**

3 credits.

Ancient religions in their political, social and cultural contexts; topics include ritual, literary and artistic representations, religious persecutions, and/or modern approaches to the study of ancient religions. Chronological and geographical focus will vary between Greece, Rome, Judaea and Egypt.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**CLASSICS 523 – PALMYRA AND THE PALMYRENES**

3 credits.

Explores the history and culture of ancient Palmyra. Topics considered during the first half of the course will include the city-state's art, architecture, economy, religion, and foreign relations - including with the Roman and Sassanian Empires. Also explores issues of identity and reception centered on the following questions: How did Palmyrenes in the service of the Roman army retain their ethnic identity while also integrating into Roman society? How is ancient Palmyrene society remembered and used by modern cultures to promote diverse political goals? and What effects do museum collection and display and academic publication have on our perception of ancient Palmyra?

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**CLASSICS 591 – UNDERGRADUATE SEMINAR: APPROACHES TO THE CLASSICAL WORLD**

3 credits.

Demonstrate knowledge of Classical and ancient Near Eastern societies and cultures through examination and interpretation of ancient texts in translation. Learn to compare and critique ancient Greek, Roman, and/or Near Eastern societies and cultures to other societies and cultures. Produce an original scholarly project based on ancient Greek, Roman, or Near Eastern society and culture.

**Requisites:** Junior standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CLASSICS 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2019**CLASSICS 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2020**CLASSICS 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CLASSICS 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**CLASSICS 699 – DIRECTED READING**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CLASSICS/ART HIST 700 – THE ART AND ARCHAEOLOGY OF ANCIENT GREECE**

3 credits.

Explores the art and archaeology of ancient Greece from the Bronze Age through the Hellenistic period.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**CLASSICS/ART HIST 704 – THE ART AND ARCHAEOLOGY OF ANCIENT ROME**

3 credits.

Explores the art and archaeology of ancient Italy, the Roman Republic, and the Roman Empire from the Iron Age to Late Antiquity.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**CLASSICS/HISTORY 801 – SEMINAR-ANCIENT HISTORY**

1-3 credits.

Special problems in Greek and Roman history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CLASSICS/PHILOS 830 – ADVANCED HISTORY OF PHILOSOPHY**

3 credits.

Seminar on the history of philosophy focusing on a period or figure(s).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CLASSICS/POLI SCI 834 – ROMAN POLITICAL THOUGHT**

3 credits.

In depth study of key works of Roman political thought, along with recent and classic scholarship in political theory, history, philosophy, classics, and literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**CLASSICS 900 – ADVANCED SEMINAR IN THEORY AND METHODOLOGY**

3 credits.

Aims to improve research skills, help develop important expertise not gained in general coursework, and to engage with topics that make CANES graduates distinctive when applying for positions after the PhD.

**Requisites:** Declared in Classical and Ancient Near Eastern Studies graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CLASSICS 970 – CLASSICAL LITERATURE AND CULTURE**

3-4 credits.

Examines central literary and cultural issues in classical antiquity from both Greek and Roman perspectives.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**COLLABORATIVE NURSING PROGRAM (CNP)****CNP 306 – TRANSITIONS: PRACTICE, PROFESSIONAL AND PERSONAL**

3 credits.

Designed to advance knowledge of nursing as it is embedded in clinical practice, address current and emerging health care trends, and examine healthcare workforce data and health care policy as it impacts opportunities for and impediments to nursing practice.

**Requisites:** Declared in Nursing (Collaborative Program) BSN**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CNP 317 – HEALTH ASSESSMENT**

3 credits.

Techniques of health history and physical examination to ascertain normal from variations of normal health conditions, in addition cultural and developmental variations are considered.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CNP 407 – FOUNDATIONS OF PROFESSIONAL NURSING PRACTICE**

3 credits.

Philosophical perspectives, theories, and standards are applied to the practice of professional nursing. Factors influencing nursing/healthcare delivery are analyzed. Professional communication and critical thinking skills are enhanced.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 441 – CHRONIC CARE MANAGEMENT**

3 credits.

Exploration of interaction of biological, psychological, social, and environmental factors important to understanding management of chronic conditions at the individual, family, community, and societal levels.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 446 – NURSING RESEARCH AND EVIDENCE-BASED PRACTICE**

3 credits.

Introduces the concept of evidence-based practice, the importance of evidence to improve clinical practice, strategies to evaluate the quality of evidence, and how to design an evidence-based project.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 447 – LEADERSHIP AND MANAGEMENT**

3 credits.

Examines nursing leadership and management using relevant theories and concepts. Analyze decision-making in relation to communication, delegation, supervision and group process.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 453 – INFORMATION MANAGEMENT AND HEALTHCARE TECHNOLOGY**

3 credits.

Utilize computer and information/decision science to support quality and safety in health care. Explore informatics issues and examine nursing's role in healthcare technology. Opportunities to use and master various healthcare technologies and healthcare data will be given.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 454 – COMMUNITY HEALTH NURSING**

3 credits.

Nursing care of populations and communities to facilitate optimal health outcomes.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNP 490 – SPECIAL TOPICS IN NURSING**

1-4 credits.

The special topics course is designed to provide a planned, systematic analysis of topics, issues and problems in the area of nursing.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CNP 519 – CAPSTONE PRACTICUM FOR REGISTERED NURSES**

3 credits.

Synthesizes professional nursing knowledge in a variety of practice settings. Practicum sites may include hospitals, clinics, long-term care (LTC), and community-based settings, or practicums in policy or health care systems. Expand skills sets by exposure to best practices in a clinical setting of choice. The practicum enriches the integration of knowledge from current and past academic and clinical learning experiences.

**Requisites:** CNP 306, 407, 441, 446, 447, 453, and 454 or concurrent enrollment

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



# COMMUNICATION ARTS (COM ARTS)

## COM ARTS 100 – INTRODUCTION TO SPEECH COMPOSITION

3 credits.

Learn how to give effective oral presentations in a variety of public speaking situations and to become better consumers of written and oral discourse. Learn basic composition and outlining skills as well as library research techniques.

**Requisites:** Students required to take the MSN ESLAT cannot enroll until the ESL 118 requirement is satisfied. Not open to students who have credit for COM ARTS 105 or 181.

**Course Designation:** Gen Ed – Communication Part A  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COM ARTS 105 – PUBLIC SPEAKING

2 credits.

Development of fundamental skills in the preparation, delivery, and evaluation of the common forms of public address.

**Requisites:** Not open to students with credit for COM ARTS 100 or 181

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

## COM ARTS 155 – INTRODUCTION TO DIGITAL MEDIA PRODUCTION

4 credits.

Teaches the skills needed to produce, engage with, and understand new and emerging technologies within the context of communication and creative expression. Become a more critical consumer and producer of digital media.

**Requisites:** Not open to special students

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COM ARTS 181 – ELEMENTS OF SPEECH-HONORS COURSE

3 credits.

The process of oral communication; principles of effective speaking; application of principles in selected speaking and reading projects.

**Requisites:** Declared in an Honors program. Not open to students with credit for COM ARTS 100 or 105. Students required to take the MSN ESLAT cannot enroll until the ESL 118 requirement is satisfied.

**Course Designation:** Gen Ed – Communication Part A  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S  
Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## COM ARTS 198 – DIRECTED STUDY

1-3 credits.

Elementary level directed study project(s) under supervision of faculty member. Graded on a credit/no credit basis.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

## COM ARTS 199 – DIRECTED STUDY

1-3 credits.

Elementary level directed study project(s) under supervision of faculty member. Graded on a lettered basis.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2007

## COM ARTS 200 – INTRODUCTION TO DIGITAL COMMUNICATION

3 credits.

An introduction to digital communication and how it shapes our everyday lives. Develop digital communication skills, explore digital media tools and trends, and examine expressions of power online.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COM ARTS 213 – INTRODUCTORY TOPIC IN COMMUNICATION ARTS: STUDY ABROAD

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

## COM ARTS 250 – SURVEY OF CONTEMPORARY MEDIA

3 credits.

Key concepts for the critical analysis of television, film, radio, and digital media. Focusing primarily on meanings, aesthetics, technology, media industries, representations, and audiences.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 260 – COMMUNICATION AND HUMAN BEHAVIOR**

3 credits.

Concepts and processes relevant to the study of communication and human behavior including approaches to communication inquiry, the dynamics of face-to-face interaction, and the pragmatic and artistic functions of public communication.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 262 – THEORY AND PRACTICE OF ARGUMENTATION AND DEBATE**

3 credits.

Practice in preparation and delivery of various types of argumentative speeches and debates.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed – Communication Part B

Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 266 – THEORY AND PRACTICE OF GROUP DISCUSSION**

3 credits.

Structure and dynamics of small group decision-making. Critical and creative problems in group interaction processes.

**Requisites:** None**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**COM ARTS 272 – INTRODUCTION TO INTERPERSONAL COMMUNICATION**

3 credits.

Survey of concepts, theories, and research concerning communication across all phases of interpersonal relationships, focusing on both theoretical and practical applications.

**Requisites:** Not open to students with credit for COM ARTS 273**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 273 – THEORY AND PRACTICE OF INTERPERSONAL COMMUNICATION**

3 credits.

Survey of concepts, theories, and research concerning communication across all phases of interpersonal relationships, focusing on both theoretical and practical applications.

**Requisites:** Not open to students with credit for COM ARTS 272**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**COM ARTS 298 – DIRECTED STUDY**

1-3 credits.

Intermediate level project under the direction of faculty member e.g., independent reading with research paper, production project, or member of research team. Graded on a credit/no credit basis.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**COM ARTS 299 – DIRECTED STUDY**

1-3 credits.

Intermediate level project under the direction of faculty member e.g., independent reading with research paper, production project, or member of research team. Graded on a letter basis.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**COM ARTS 300 – FILM COMEDY**

3 credits.

An exploration of the comedy genre, examining theories of humor in film; introducing conceptual tools for critical appreciation and analysis; and investigating different subgenres and tendencies prominent in various phases and traditions of popular film comedy.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**COM ARTS 310 – TOPICS IN RHETORIC AND COMMUNICATION SCIENCE**

3 credits.

Explore various topics in rhetoric or communication science.

**Requisites:** Sophomore standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**COM ARTS 313 – TOPICS IN FILM AND MEDIA STUDIES**

3 credits.

Explore various topics in film and media studies, history, and theory.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS/GEN&WS 316 – GENDER AND COMMUNICATION**

3 credits.

Effective communication requires awareness of how gender influences communication and our capacity to build lasting and meaningful relationships. Learn about theories and concepts to understand how gender influences our interpersonal, professional, and social lives. Topics include terms and concepts relevant to the study of how we communicate about gender, sex and sexuality, including identity, language and nonverbal behavior, socialization, close personal relationships, education, work, violence, media and social movements.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COM ARTS 317 – RHETORIC AND HEALTH**

3 credits.

Investigate how the concept of health is rhetorically constructed and deployed in a number of different contexts. Explore how language and argument shape our understanding of health, how health is positioned in opposition to illness and disability, and how the meaning of health has become a site of argument and controversy.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 318 – INTRODUCTION TO HEALTH COMMUNICATION**

3 credits.

Explore the diversity of health experiences and the ways in which health communication affects our lives, whether it is through interpersonal conversations about health issues, exposure to health information in the media, or through our personal involvement with the healthcare system.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COM ARTS 325 – MEDIA AND HUMAN BEHAVIOR**

3 credits.

Investigate the ways in which individuals use, create, and respond to media content in the context of increasingly blurred boundaries between "mass" and "interpersonal" media. We will consider social scientific theories and research on a wide array of topics, including media uses and effects with regard to social connection, learning, judgments, perceptions, stereotypes, violence, consumption, and political participation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 345 – ONLINE COMMUNICATION AND PERSONAL RELATIONSHIPS**

3 credits.

Examines how personal relationships unfold in online communication contexts (social network sites, online dating, mobile computing). Topics include impression formation and management, deception and trust, self-perception and identity, social support and relationship maintenance.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 346 – CRITICAL INTERNET STUDIES**

3 credits.

Traces the Internet's history, reception, audience, industries, rhetorics, fictional and filmic narratives, and potential as a purveyor and transmitter of culture and values.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS/CHICLA 347 – RACE, ETHNICITY, AND MEDIA**

3 credits.

Introduction to the changing images of race and ethnicity in U.S. entertainment media and popular culture. Surveys history, key concepts and contemporary debates regarding mediated representation of ethnic minorities. Critical and cultural studies approaches are emphasized.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 350 – INTRODUCTION TO FILM**

3 credits.

Explains how films work using classics such as "Citizen Kane," "Vertigo," "Battleship Potemkin," and "Do The Right Thing." Study film as an art form and a medium, cover all the major film types (silent, classical, and contemporary narrative cinema, art cinema, animation, documentary, and experimental film), and get introduced to two basic approaches to film criticism: authorship criticism and genre criticism. Learn to recognize film techniques--mise-en-scène, cinematography, editing, and sound--and to analyze how filmmakers make us watch, think, and feel.

**Requisites:** Sophomore standing or COM ARTS 250**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 351 – TELEVISION INDUSTRIES**

3 credits.

Critical overview of the cultural industries driving television in the United States, from broadcast networks and cable to downloading and streaming, focusing on economic and regulatory structures, programming practices, labor, globalization, audiences, and adaptations to changing conditions in the digital age.

**Requisites:** Sophomore standing or COM ARTS 250**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 352 – FILM HISTORY TO 1960**

3 credits.

Development of cinema as a communication medium and art form from its origins to the 1960s. Attention given to national cinemas and international trends through the study of landmark films.

**Requisites:** COM ARTS 350 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**COM ARTS 354 – FILM GENRES**

3 credits.

Explores six major film genres -- musical; thriller; comedy; horror; drama; and melodrama -- investigating their narrative and stylistic conventions and the principles underlying them. Critical, historical, and theoretical approaches examine definitional criteria and ambiguities; key elements, functions, goals, and effects; and significant subgenres, cycles, and trends.

**Requisites:** COM ARTS 350**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**COM ARTS 355 – INTRODUCTION TO MEDIA PRODUCTION**

4 credits.

Theory and practice of media production and screenwriting.

**Requisites:** Sophomore standing or COM ARTS 155**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 357 – HISTORY OF THE ANIMATED FILM**

3 credits.

Survey of the development of animation as a motion picture production technique, as a film genre, a part of the Hollywood classical cinema, and an independent art form.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 358 – HISTORY OF DOCUMENTARY FILM**

3 credits.

Development and history of documentary film and video from Lumiere to the present.

**Requisites:** COM ARTS 350 or declared in Communication Arts MA or PhD**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 359 – SPORTS MEDIA**

3 credits.

Examines sports media using the frameworks of media and cultural studies. The relationship between sports and popular culture provides an important site for understanding and critiquing the media's relationships to social, cultural, economic, and political structures. Topics for discussion will include sports media industries and technologies; representations of race, class, gender, sexual orientation, nationality, and other identities; and the intersection of sports media cultures with such issues as activism and social change, ethics and morality, gambling and fantasy sports, celebrity athletes, and fandom.

**Requisites:** COM ARTS 250 or 351**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**COM ARTS 360 – INTRODUCTION TO RHETORIC IN POLITICS AND CULTURE**

3 credits.

An introduction to the study of rhetoric in politics and culture. Explores the interrelationship of theory, criticism, and practice. Students gain an understanding of rhetoric as a social force emerging from political and cultural contexts and as an influence on those contexts.

**Requisites:** Sophomore standing or COM ARTS 260

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 361 – INTRODUCTION TO QUANTITATIVE RESEARCH IN COMMUNICATION**

3 credits.

An introduction to social science research methods and statistical analyses applicable to the study of communication research and mass media effects.

**Requisites:** Sophomore standing and satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COM ARTS 368 – THEORY AND PRACTICE OF PERSUASION**

3 credits.

A theory-based examination of the role of communication in attitude formation and planned social change. Analysis and creation of persuasive messages.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 370 – GREAT SPEAKERS AND SPEECHES**

3 credits.

Significant speeches from throughout history, generally from the United States. Speakers studied include Pericles, Abraham Lincoln, Elizabeth Cady Stanton, Frederick Douglass, Emma Watson, John F. Kennedy, Barbara Jordan, Nelson Mandela.

**Requisites:** Sophomore standing or COM ARTS 260

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 371 – COMMUNICATION AND CONFLICT RESOLUTION**

3 credits.

Examines intra- and interpersonal theories of the causes and functions of conflict. Focuses on message strategies for conflict resolution and/or management. Both theoretical and applied issues.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COM ARTS 372 – RHETORIC OF CAMPAIGNS AND REVOLUTIONS**

3 credits.

Public discourse as it affects and reflects the process of dynamic social change. Historical and contemporary instances of rhetorical processes.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COM ARTS 373 – INTERCULTURAL COMMUNICATION & RHETORIC**

3 credits.

The transnational movement of people, goods, and discourses blurs the boundaries between the local and global, making intercultural communication and rhetoric essential to our personal and public lives. We explore how rhetoric and communication function between and across cultures and examine how culture, history, and power constitute our cultural identities, our modes of communication, and how we engage with others.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COM ARTS/RELIG ST 374 – THE RHETORIC OF RELIGION**

3 credits.

Rhetorical character of religious controversy and sectarian persuasion in Western religion.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COM ARTS 375 – ETHICS OF ENTERTAINMENT MEDIA**

3 credits.

Develop skills for viewing and interrogating entertainment media through the lens of ethical theory and to articulate their own ethical stance on a diverse range of media, including documentary film, sports entertainment, reality television, and digital media. By approaching ethics from a media studies perspective, ask questions about how media are produced, how audiences are created and engaged, how communities and cultures are represented, and how we should respond to these different forms of media and the ethical questions that they raise.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**COM ARTS 376 – TOPICS IN DIGITAL STUDIES (RADIO, TELEVISION, & FILM)**

3 credits.

Explore topics in film and media studies, with a digital focus.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**COM ARTS 377 – TOPICS IN DIGITAL STUDIES (COMMUNICATION SCIENCE & RHETORIC)**

3 credits.

Explore topics in communication science and rhetoric, with a digital focus.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 402 – THE PSYCHOLOGY OF COMMUNICATION**

3 credits.

The role and function of information processing in human communication behavior.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS/GEN&WS 418 – GENDER, SEXUALITY, AND THE MEDIA**

3 credits.

Examines images of gender and sexuality in the media, with a focus on contemporary media in the U.S. Using theories from cultural studies, film and media studies, gender studies, and communication we will explore different processes and practices of gender and sexuality. Look at the way that gender and sexuality are constructed through social, cultural, and economic forces, and the way that these identities intersect with other social identities such as race, ethnicity, and class. Consider the way that media impact our understanding of feminism and post-feminism, violence, celebrity, consumer culture, subcultures and activism.

**Requisites:** GEN&WS 101, 102, 103, GENWS/SOC/GEN&WS 200, COMM ARTS 250 or graduate/professional standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS/CHICLA 419 – LATINO/AS AND MEDIA**

3 credits.

Critical and historical survey of the participation and representation of Latino/as in U.S. film, television, and popular culture, with a primary focus on Hispanic representation in Hollywood-produced imagery. The counter-images of Latino and Latina media producers also will be explored.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS/ASIAN AM 420 – ASIAN AMERICANS AND MEDIA**

3 credits.

Examines representations of Asian American in American media using historical, analytical, and critical approaches. Issues of cultural production, identity, race, politics, and gender are linked to examinations of specific media forms.

**Requisites:** COM ARTS/CHICLA/COM ARTS 347, ASIAN AM 101, or sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**COM ARTS/ASIAN 443 – INDIAN CINEMA AND BEYOND**

3 credits.

India is home to one of the largest film industries in the world, Bollywood. Beyond Bollywood, India has a thriving film culture that caters to its many regional languages. Explore India's diverse, yet interconnected film and media cultures including Bollywood, and regional film industries such as Tamil, Bengali, Telugu and Malayalam. Examine film-industry formations, questions of genre, style and auteurship, ethnic conflicts, gender non-conformity, caste, settler colonialism, censorship and linguistic nationalism that shape cinematic discourses in the country.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**COM ARTS/AFRICAN/L I S 444 – TECHNOLOGY AND DEVELOPMENT IN AFRICA AND BEYOND**

3 credits.

Surveys the past 20 years of digital technology and communications culture on the African continent, cross-referenced with discourse on technology experiences in other parts of the developing world, through the framework of development studies. Readings include case studies of micro-tech practices as well as political and social use of new media, and government and NGO-led tech interventions. Information Communication Technology for Development (ICT4D) is a key area of focus. Cross-discipline areas include communications and media studies, African, Latin American and International area studies, as well as the social anthropology of technology and science, and design. Think critically about technology use in the context of different tech cultures from around the world. Apply this perspective towards new media solutions to social problems.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 448 – MEDIA AND NATIONAL IDENTITY**

3 credits.

Examination of the various roles that film, television, and other media play in creating, challenging, and negotiating national and global identities.

**Requisites:** COM ARTS 250 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**COM ARTS 449 – SOUND CULTURES: PODCASTING AND MUSIC**

3 credits.

Sound plays a crucial but understudied role in experiences of media and cultural life. From the mundane sounds of our daily routines to the irresistible refrains of our favorite songs, sound (in its various guises as noise, music, echo, vibration, etc.) is fundamental to communications media and, more broadly, to our perceptions of the world around us. An introduction to the emerging field of sound studies and an investigation into the role sound and music (or lack thereof) play in various communications media. Through audio assignments such as the creation of podcasts, learn the basics of digital audio recording and editing software and how to present and distribute audio content via the Internet, specifically as podcasts. Gain practical skills for creating digital audio projects and a deeper appreciation for how paying attention to sound leads to unique understandings of history, culture, and media technologies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS 450 – CULTURAL HISTORY OF BROADCASTING**

3 credits.

Traces the development of broadcasting as a cultural institution, examining the emergence of radio and television within the context of national identity and globalization.

**Requisites:** COM ARTS 250 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS 451 – TELEVISION CRITICISM**

3 credits.

Analysis of selected television programming, interpretation of contemporary television programs, and survey of existing critical approaches.

**Requisites:** COM ARTS 351 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**COM ARTS 454 – CRITICAL FILM ANALYSIS**

3 credits.

Intensive analysis of selected films, using contemporary critical theories and methods.

**Requisites:** (Junior standing and COM ARTS 350) or declared in Communication Arts MA or PhD

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COM ARTS 455 – FRENCH FILM**

3 credits.

Survey of French cinema from 1895 to the present. Emphasis on aesthetic trends, film movements, film industry, and cultural context.

**Requisites:** COM ARTS 350 or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**COM ARTS 458 – GLOBAL MEDIA CULTURES**

3 credits.

Analysis of media systems, practices and uses from a global perspective.

**Requisites:** COM ARTS 351 or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**COM ARTS 459 – NEW MEDIA AND SOCIETY**

3 credits.

Explores political, economic and cultural relationships between new media of communication and society, including issues of history, race, gender, class, globalization, national identity and everyday life.

**Requisites:** COM ARTS 346 or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**COM ARTS/ITALIAN 460 – ITALIAN FILM**

3 credits.

General survey of Italian cinema and of the relationship between film and the other arts. Consideration of the Italian and European socio-political context and developments in film theory.

**Requisites:** ITALIAN 204, COM ARTS 350, or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 461 – GLOBAL ART CINEMA**

3 credits.

In the wake of World War Two, European directors began making films that employed location shooting, ambiguity, psychological realism, and unfamiliar stylistic flourishes. Such films drew on literary modernism, experimenting with time shifting, extreme duration, subjectivity, and reflexivity. "Art cinema," as it came to be called, is now the dominant storytelling mode of the contemporary film festival circuit and constitutes a robust alternative to mainstream genre cinema. Explores art cinema from a variety of national and transnational contexts, analyzing its narratives, styles, and cultural contexts. Investigates the work of directors from the first generation of art cinema, including Michelangelo Antonioni, Robert Bresson, Ingmar Bergman, and Agnès Varda, and more recent work by Aki Kaurismäki, Abbas Kiarostami, Wong Kar-wai, and Claire Denis.

**Requisites:** COM ARTS 350 or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 462 – AMERICAN INDEPENDENT CINEMA**

3 credits.

History of American independent narrative cinema with particular attention to the impact various art movements and subcultures have had on its development over the past 60 years.

**Requisites:** COM ARTS 350

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**COM ARTS 463 – AVANT-GARDE FILM**

3 credits.

Examines the history and aesthetics of avant-garde/experimental film from its beginnings in the late 1910s to the present. Studies key aesthetic programs and their relations to adjacent movements in art and critical theory.

**Requisites:** COM ARTS 350 or declared in Communication Arts MA or PhD

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**COM ARTS 465 – EDITING AND POST-PRODUCTION FOR VIDEO AND FILM**

4 credits.

Focus on the theory and practice of video editing and post-production. Gain a thorough understanding of narrative editing techniques, color correction, audio post-production and the requisite software. Discusses the art of post-production and how post-production affects narrative function in moving picture media (including films, music videos, and television).

**Requisites:** COM ARTS 355

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 466 – WRITING FOR TELEVISION AND FILM**

3 credits.

Basic introduction to the elements of a successful dramatic screenplay. Particular emphasis placed on story concept, dramatic structure, character development, dialogue, and visual storytelling.

**Requisites:** COM ARTS 355

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 467 – CINEMATOGRAPHY AND SOUND RECORDING**

4 credits.

Learn the fundamentals of short-film production, including cinematography, lighting, and sound recording. With an emphasis on dramatic storytelling, produce scenes from existing scripts, rotating through crew positions. Directing, editing, and color grading will be covered, with casting, location scouting, and production design incorporated to successfully produce each scene. Gain an understanding of the inner-workings of a film crew, the operation of digital cinema technologies, and visual and aural storytelling aesthetics and techniques.

**Requisites:** COM ARTS 355

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 468 – PRODUCING FOR INTERNET TV AND VIDEO**

3 credits.

Producing Internet television and video (which encompasses a wide range of media content, from expensive Netflix and Amazon shows to low-budget YouTube channels). With its focus on "producing" and the role of the producer, combines the hands-on production work of writing, shooting, and editing videos with an emphasis on entrepreneurship and the innovation of sustainable business models.

**Requisites:** COM ARTS 155 or 355

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COM ARTS 470 – CONTEMPORARY POLITICAL DISCOURSE**

3 credits.

Examines themes, genres, and significant instances of contemporary political discourse, as well as issues and concerns that arise in public discussions of political discourse. Case studies and theoretical analyses are considered.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 472 – RHETORIC AND TECHNOLOGY**

3 credits.

Explore the technologies of rhetoric and the rhetoric of technology's impact on the culture from which it emerges. Collect and apply a number of perspectives on the relationship between technology and society; explore the effect of various technologies on rhetorical practices; investigate the way that technology extends the body's capacity; think through collective affective reactions – such as optimism, panic, and wonder – in response to new technologies; and consider carefully why and how controversies about technology take shape in the public sphere.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**COM ARTS 476 – NATURE OF CRITICISM-THE PUBLIC ARTS OF COMMUNICATION**

3 credits.

A survey of rhetorical criticism methods. Apply methods to landmark historical and contemporary texts – from presidential war discourse to women's suffrage rhetoric to timely political debates.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COM ARTS 478 – RHETORIC AND POWER ON THE INTERNET**

3 credits.

Explores and analyzes Internet communication as a magnifier, transmitter, and limiter of power for both individual people and institutions with special attention to the roles of politics, social issues, and justice. Use rhetorical analysis to engage in the critical assessment of Internet media content that exerts power in their lives.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**COM ARTS 509 – DIGITAL MEDIA AND POLITICAL COMMUNICATION**

3 credits.

Examines core questions related to the impacts of digital media (including but not limited to the Internet) on processes of political communication and the health of democratic governance in advanced industrialized democracies.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**COM ARTS 513 – TOPICS IN COMMUNICATION ARTS: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**COM ARTS 518 – COMMUNICATION AND HEALTH INEQUALITIES**

3 credits.

Explore the role of communication as a contributor to existing health inequalities and a means of helping to reduce them. Consider social scientific theories and research on a wide array of topics including communication inequalities and public discourse around social determinants of health.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**COM ARTS/FOLKLORE 522 – DIGITAL STORYTELLING FOR SOCIAL MEDIA**

3 credits.

Explore everyday communication in social media. Learn digital recording technologies for documenting everyday communication and the use of digital content in social media.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science  
Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS 525 – MEDIA, DELIBERATION, AND PUBLIC ISSUES**

3 credits.

Explore how political issues are communicated and debated in the media, and how they are understood (or not) by individual media users, with an eye toward how these dynamics impact the health of communication processes in democratic systems.

**Requisites:** COM ARTS 260 or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2017**COM ARTS 540 – TELEVISION GENRES**

3 credits.

An examination of a specific television genre, analyzing it as a narrative, economic, cultural, and political entity and exploring its role in perpetuating and/or challenging ideas of what society is or could be.

**Requisites:** (COM ARTS 250 and 351) or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**COM ARTS 547 – DIGITAL GAME CULTURES**

3 credits.

An examination of the forms, practices, economies, institutions, politics, and modes of engagement that make digital games an important site of culture and power.

**Requisites:** COM ARTS 250, (COM ARTS 351 or 346), and junior standing, or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**COM ARTS 552 – CONTEMPORARY HOLLYWOOD CINEMA**

3 credits.

An examination of contemporary Hollywood films focusing on the interrelations of cinematic narrative, style, technology, and institutions. Survey the work of major directors and consider the box office impact of key genres and film cycles.

**Requisites:** COM ARTS 350 or concurrent enrollment**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS 556 – THE AMERICAN FILM INDUSTRY IN THE ERA OF THE STUDIO SYSTEM**

3 credits.

Influences of industrial structure, trade policies, foreign markets and censorship on Hollywood's production practices up to 1948.

**Requisites:** COM ARTS 350, 351, or declared in Communication Arts MA or PhD**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**COM ARTS 557 – CONTEMPORARY MEDIA INDUSTRIES**

3 credits.

Analysis of major trends in media industries since the 1970s with special emphasis on conglomeration, globalization, new technologies, and changing modes of production and distribution.

**Requisites:** COM ARTS 350, 351, or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2015**COM ARTS 562 – THEORIES OF DELIBERATION AND CONTROVERSY**

3 credits.

Examination of theories of deliberation and controversy. Application of theories to public controversies.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**COM ARTS 565 – COMMUNICATION AND INTERETHNIC BEHAVIOR**

3 credits.

The relation of communication processes to interethnic and interracial attitudes and behavior. Social and psychological foundations of interethnic communication and conflict, group identification and communication processes, interpersonal communication and culture, communication about race and ethnicity, mass media content and effects.

**Requisites:** Junior standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 570 – CLASSICAL RHETORICAL THEORY**

3 credits.

Study of major theories of rhetoric from their origins in ancient Greece to Bacon, including theories of Plato, Aristotle, Cicero, Quintilian, Longinus, St. Augustine, and others.

**Requisites:** (Two from: COM ARTS 262, 360, 370, 372, 470, 472, 562, or COM ARTS/RELIG ST/COM ARTS 374) or graduate/professional standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 573 – RHETORIC OF GLOBALIZATION AND TRANSNATIONALISM**

3 credits.

Introduction to basic concepts in global and transnational rhetorical studies and provided with the analytic tools to examine discourses about globalization and transnationalism produced by key global actors including transnational corporations, states, global institutions such as the World Bank, media producers, human rights advocates, and activists.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**COM ARTS 574 – RHETORIC OF US IMMIGRATION AND NATURALIZATION**

3 credits.

Explores U.S. immigration and naturalization rhetoric across various spheres: federal, state, and grassroots. Patterns of immigration and naturalization rhetoric, the tactics different actors use, and the transformations that have taken place since the founding of the U.S. republic are examined.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**COM ARTS 575 – COMMUNICATION IN COMPLEX ORGANIZATIONS**

3 credits.

Examine problem solving within complex organizations. Study communication pitfalls, decision-making biases, and problem-solving blind spots that negatively affect one's ability to communicate. Learn to innovate in teams and make high-quality decisions.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COM ARTS 577 – DYNAMICS OF ONLINE RELATIONSHIPS**

3 credits.

Examines how people form their identities and manage their personal relationships using new communication technologies (social network sites, online dating, video games). Emphasis will be placed on how humans adapt to technology and use it for social purposes.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 605 – DIGITAL STUDIES CAPSTONE**

1 credit.

Create an online portfolio integrating material learned throughout the certificate program. Explore opportunities for professional and personal growth. Must be declared in Digital Studies Certificate with senior standing.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 608 – SPECIAL TOPICS IN MEDIA AND CULTURAL STUDIES**

3 credits.

Specialized topics and issues in media and cultural studies.

**Requisites:** COM ARTS 250, 346, 351, COM ARTS/CHICLA/COM ARTS 347 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**COM ARTS 609 – SPECIAL TOPICS IN PRODUCTION**

3 credits.

Specialized advanced subject matter in film, video or digital media production.

**Requisites:** COM ARTS 355 or declared in Communication Arts MA or PhD

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 610 – SPECIAL TOPICS IN RHETORIC AND PUBLIC ADDRESS**

3 credits.

Specialized subject matter of current interest in rhetoric and public address.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 612 – SPECIAL TOPICS IN COMMUNICATION SCIENCE**

3 credits.

Specialized subject matter of current interest in communication theory and research.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**COM ARTS 613 – SPECIAL TOPICS IN FILM**

3 credits.

Specialized topics and issues in film history, theory, and criticism.

**Requisites:** COM ARTS 350 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**COM ARTS 614 – FIELD EXPERIENCE IN COMMUNICATION**

1 credit.

Application of communication concepts to problems in such professional field settings as business organizations, media firms, political offices and organizations, and governmental agencies. Must be declared in Communication Arts.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 615 – SECOND FIELD EXPERIENCE IN COMMUNICATION**

1 credit.

Application of communication concepts to problems in such professional field settings as business organizations, media firms, political offices and organizations, and governmental agencies. Must be declared in Communication Arts.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS/HDFS/JOURN 616 – MASS MEDIA AND YOUTH**

3 credits.

Children's and adolescents' use of mass media and mass media effects on them. Particular attention is given to changes in comprehension and other cognitive activities that give insights into media use and effects.

**Requisites:** JOURN 202, COM ARTS 325, HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, PSYCH 460, or LSC 251 (or PSYCH 560 prior to Fall 2017)**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**COM ARTS/JOURN/LSC 617 – HEALTH COMMUNICATION IN THE INFORMATION AGE**

3 credits.

Examines the role of communication in health, how the revolution in information technology has affected health communication, and the assumptions about health information and communication that drive current efforts to use technologies.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**COM ARTS/ED PSYCH 626 – YOUTH DEVELOPMENT AND SOCIAL MEDIA: INTERDISCIPLINARY TRAINING SEMINAR**

1 credit.

Advanced level seminar that involves critical analysis of conceptual and methodological issues underlying empirical research on how social media affect and are affected by adolescent development, provides a venue for feedback on design of research studies involving youth and social media, and fosters interdisciplinary approaches to studying connections between youth development and social media use.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**COM ARTS 651 – ADVANCED VIDEO PRODUCTION AND DIRECTION**

3 credits.

Remote video production in both documentary and narrative genres.

**Requisites:** COM ARTS 355**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS/GERMAN 655 – GERMAN FILM**

3 credits.

Important filmmakers from 1910 to the present; their relation to German cultural and social history of the period.

**Requisites:** GERMAN 305, 337, 351, 362, 372, 385, or COM ARTS 350**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**COM ARTS 659 – ADVANCED MOTION PICTURE PRODUCTION WORKSHOP**

4 credits.

Provides an immersive experience in the art of cinematic storytelling. This capstone workshop is structured around the creation of a half-hour finished film, planned and completed as a group, with roles matching those of a professional crew. Working with an existing script and using state-of-the-art digital tools, students gain knowledge in a wide variety of motion-picture production skills. Most importantly, explore the meanings and nuances of a script, making the artistic choices necessary to bring the story to the screen. Present a completed film in a public, campus screening.

**Requisites:** COM ARTS 467**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**COM ARTS 669 – FILM THEORY**

3 credits.

Survey of significant trends within both classical and contemporary film theory. Designed for those interested in reading, analyzing, and evaluating the central concepts and intellectual history of writings about film, particularly with respect to film as a medium presenting an array of aesthetic, psychological, and social potentialities. Whereas classical film theory attempts to treat cinema as a unique art form, contemporary film theory addresses issues related to cinema as a mode of communication, a source of visual pleasure, and as an ideological tool. Much contemporary theory attempts to incorporate the insights of other critical and analytical paradigms, such as semiotics, psychoanalysis, feminism, queer theory, critical race theory, postmodernism, and cognitive science. Questions regarding the ontology of cinema, its relation to existing theories of art, its effects on spectators, and the various ways in which its formal properties create meaning are considered.

**Requisites:** COM ARTS 350 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**COM ARTS 671 – COMMUNICATION AND SOCIAL CONFLICT**

3 credits.

Survey of current theory and research on conflict in face-to-face interaction.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**COM ARTS 681 – SENIOR HONORS THESIS**

3 credits.

Research and preparation for writing senior Honors in the Major thesis under the direction of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2021**COM ARTS 682 – SENIOR HONORS THESIS**

3 credits.

Writing and completion of senior Honors in the Major thesis begun in COM ARTS 681 under the direction of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2022**COM ARTS 691 – SENIOR THESIS**

2-3 credits.

Research and preparation for the writing of the senior thesis under the direction of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**COM ARTS 692 – SENIOR THESIS**

2-3 credits.

Writing and completion of senior thesis begun in COM ARTS 691 under the direction of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2021**COM ARTS 698 – DIRECTED STUDY**

1-3 credits.

Advanced level project under the direction of faculty member e.g., independent reading with research paper, production project, or member of research team. Graded on a credit/no credit basis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 699 – DIRECTED STUDY**

1-3 credits.

Advanced level project under the direction of faculty member e.g., independent reading with research paper, production project, or member of research team. Graded on a letter basis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS/ENGL 704 – INTELLECTUAL SOURCES OF CONTEMPORARY COMPOSITION THEORY I-CLASSICAL**

3 credits.

Selected issues in the history of rhetoric, concentrating on classical theories of invention, and their importance for contemporary issues in composition theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015

**COM ARTS/L I S 705 – INTRODUCTORY ANALYTICS FOR DECISION MAKING**

3 credits.

Introduces key stages in the processes of gathering and analyzing data for decision making, including tasks, methods, and tools used at each stage. Topics include developing the research question from organizational goals, choosing appropriate data collection methods, sampling, basics of measurement and question design, managing and visualizing data, descriptive statistics and basic inferential statistics such as correlations, regressions, and ANOVA.

**Requisites:** Graduate/professional standing or Declared in Analytics for Decision Making capstone certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS 760 – ADVANCES IN COMMUNICATION THEORIES**

3 credits.

In-depth review and evaluation of behavioral and social scientific theories of human communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COM ARTS 762 – COMMUNICATION RESEARCH METHODS**

3 credits.

Epistemological and methodological principles of behavioral and social scientific research of particular relevance to communication research, including various research designs and modes of observation, casual inferences, and basic hands-on experiences in empirical research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COM ARTS 799 – INDEPENDENT STUDY**

1-3 credits.

Independent research and writing under the supervision of an instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS/JOURN/LSC 831 – PSYCHOLOGY OF ENTERTAINMENT MEDIA**

3 credits.

Provides an in-depth look into entertainment media, including its effects on individuals, social groups, and society. The focus on entertainment content is across platforms - from "mass" to social media. Emphasis will be paid to psychological, individual-level effects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**COM ARTS 902 – FILM COLLOQUIUM**

1 credit.

Studies in advanced research in film history, theory and criticism.

**Requisites:** Declared in Communication Arts MA or PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 903 – MEDIA AND CULTURAL STUDIES COLLOQUIUM**

1 credit.

Current research in cultural studies, audience effects, broadcast regulation, history of broadcasting and comparative national systems.

**Requisites:** Declared in Communication Arts MA or PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 904 – COMMUNICATION SCIENCE COLLOQUIUM**

1 credit.

Social scientific approaches to the study of interpersonal communication and media effects.

**Requisites:** Declared in Communication Arts MA or PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COM ARTS 905 – RHETORIC COLLOQUIUM**

1-3 credits.

Advanced research in rhetorical theory and criticism, and in the history of public address.

**Requisites:** Declared in Communication Arts MA or PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COM ARTS/CURRIC 914 – HOW GAMES CHANGE US**

3 credits.

Video games can be powerful experiences that take us to new worlds, teach us about complex systems, and provoke a range of emotions. Games transform us while we play, and some of these changes can be hard to predict and understand. Games can disrupt our sense of self, reshape our pleasures and feelings, lead us to question deeply held values, and allow us to experience new forms of embodiment through an avatar. A growing body of research in game studies engages with this potential for expansive change by focusing on player experience from a variety of methodological perspectives, including phenomenological, feminist and queer theory, critical disability studies, learning sciences, ecocriticism, and media archeology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COM ARTS 950 – SEMINAR-RADIO TELEVISION FILM**

2-3 credits.

An advanced review and exploration of theoretical and methodological developments in media studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 955 – MEDIA HISTORY AND HISTORIOGRAPHY**

3 credits.

Post-structuralist historical theory, historiographical methods, and issues in historiography for students of media history. Introduction to archival research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**COM ARTS 958 – SEMINAR IN FILM HISTORY**

2-3 credits.

Seminar probes theoretical questions concerning nature of historical knowledge, examines scholarly models and introduces methodologies and resources for research on the history of cinema.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 966 – SEMINAR-MODERN RHETORICAL THEORY**

2-3 credits.

A review of one or more theoretical developments in rhetoric occurring in the modern period.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**COM ARTS 967 – SEMINAR-PROBLEMS IN COMMUNICATION AND PUBLIC ADDRESS**

2-3 credits.

An examination of current theoretical and/or practical problems in communication and/or public address.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**COM ARTS 969 – SEMINAR: CONTEMPORARY RHETORICAL THEORY**

2-3 credits.

A review of recent and ongoing theoretical developments in rhetorical theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 970 – SEMINAR IN COMMUNICATION SCIENCE**

3 credits.

A critical review of theoretical developments in social scientific studies of communication and its psychological and/or social impact.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COM ARTS 976 – SEMINAR IN RHETORICAL CRITICISM**

2-3 credits.

An examination of historical and/or ongoing developments in methodological and analytic approaches to rhetorical studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**COM ARTS 990 – RESEARCH AND THESIS**

1-9 credits.

Independent research and writing under the supervision of an instructor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## COMMUNICATION SCIENCES AND DISORDERS (CS&D)

**CS&D 110 – INTRODUCTION TO COMMUNICATIVE DISORDERS**

3 credits.

A survey of the scientific basis of normal and disordered communication; covers speech, hearing, and language.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 201 – ANATOMY AND PHYSIOLOGY OF SPEECH PRODUCTION**

3 credits.

Anatomy and physiology of the speech production mechanism; acoustic characteristics of the speech signal.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 202 – NORMAL ASPECTS OF HEARING**

3 credits.

Physical acoustics of sound, the anatomy and physiology of the auditory system, and the psychology related to hearing, known as psychoacoustics.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 210 – NEURAL BASIS OF COMMUNICATION**

3 credits.

Considers the neural basis for communicative behaviors. Provides understanding of the anatomy, physiology, and physiopathology of the central and peripheral nervous systems as they relate to normal and disordered communication.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 240 – LANGUAGE DEVELOPMENT IN CHILDREN AND ADOLESCENTS**

3 credits.

Covers communication and language development from infancy to adulthood.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CS&D 303 – SPEECH ACOUSTICS AND PERCEPTION**

3 credits.

Detailed examination of the acoustic properties of the speech signal within the source-filter theory of speech production. Theories of speech perception pertaining to phoneme and word recognition are presented and discussed.

**Requisites:** CS&D 201 and 202**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CS&D 315 – PHONETICS AND PHONOLOGICAL DEVELOPMENT**

3 credits.

Introduction to the international phonetic alphabet and articulatory phonetics. Overview of typical and atypical phonological development.

**Requisites:** CS&D 201 and 240**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CS&D 318 – VOICE, CRANIOFACIAL, AND FLUENCY DISORDERS**

3 credits.

Provides a basis for understanding the communication problems of individuals with voice disorders, orofacial anomalies, and fluency disorders.

**Requisites:** CS&D 201, 202, 240 and Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CS&D 320 – INTRODUCTION TO AUDIOLOGY**

3 credits.

Introduction to the profession of Audiology, hearing assessment across the lifespan, ear and hearing disorders, management options.

**Requisites:** CS&D 202

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 371 – PRE-CLINICAL OBSERVATION OF CHILDREN AND ADULTS**

3 credits.

Emphasizes clinical writing, group participation, and observation of video and live treatment sessions to develop and improve observational skills related to communication behaviours and clinical teaching.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 424 – SIGN LANGUAGE I**

2 credits.

Manual alphabet, numbers, and 300 basic signs in both American Sign Language (ASL) and Manually Coded English (MCE) systems. Emphasizes words and sign skill for clinic/schools.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 425 – AUDITORY REHABILITATION**

3 credits.

Topics include hearing devices and technology, auditory rehabilitation principles and methods across the lifespan.

**Requisites:** CS&D 201, 202, and 320

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 440 – CHILD LANGUAGE DISORDERS, ASSESSMENT AND INTERVENTION**

3 credits.

Language differences and disorders in various populations are covered, as well as means of assessment and intervention.

**Requisites:** CS&D 240

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 481 – UNDERGRADUATE JUNIOR HONORS**

3 credits.

A writing-intensive introduction to research methodology in Communication Sciences and Disorders, emphasizing participant selection criteria, experimental design and methodology, data collection, and data analysis, leading to the design and future implementation of an independent research project. Activities include written and oral critiques of published research, written summaries of oral research presentations, and composition of an individual research proposal.

**Requisites:** Satisfied Communications A requirement and declared in an Honors program

**Course Designation:** Gen Ed - Communication Part B

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 503 – NEURAL MECHANISMS OF SPEECH, HEARING AND LANGUAGE**

3 credits.

Basic neuroanatomical and neurophysiological mechanisms underlying the communication process. Neuropathologies and their associated communication disorders.

**Requisites:** (Declared in Biology or Neurobiology) and (CS&D 210 or ZOOLOGY/PSYCH/ZOOLOGY 523), or declared in Communication Sciences Disorders MS

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**CS&D 698 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 1991**CS&D 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 702 – RESEARCH METHODS IN COMMUNICATION SCIENCES AND DISORDERS**

3 credits.

Introduction to research methods that produce clinicians and clinician-scientists who: (1) are conversant in and can use scientific principles in their daily lives research, and clinical practice; (2) evaluate scientific evidence as disseminated through multiple channels; (3) find and store research findings efficiently for use in clinical practice or research studies; and (4) understand and implement ethical use of human participants, animal subjects and responsible conduct of research principles in their careers.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**CS&D 703 – LANGUAGE AND LEARNING DISORDERS OF CHILDREN**

3 credits.

Theoretical concepts of symbolic disorders with emphasis on variables which interfere with language learning and function.

**Requisites:** Declared in Communication Sciences Disorders MS or Pharmacy DPH**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CS&D 704 – ACQUIRED LANGUAGE AND COGNITIVE-COMMUNICATION DISORDERS IN ADULTS**

3 credits.

Intervention for adults with acquired aphasia and cognitive-communication disorders, including principles of evaluation and treatment.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 705 – MOTOR SPEECH DISORDERS/AUGMENTATIVE AND ALTERNATIVE COMMUNICATION**

3 credits.

The nature and classification of motor speech disorders, and techniques and methods which provide non-speaking children and adults with effective means of interaction and communication.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CS&D 706 – MANAGEMENT AND ASSESSMENT OF VOICE DISORDERS**

3 credits.

Presents information of the anatomy and physiology of voice production, the various diseases and conditions that cause voice disorders, ways to assess and treat voice disorders across the lifespan.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CS&D 707 – SWALLOWING DISORDERS**

2-3 credits.

Presents information on the anatomy, physiology, and neural bases of normal swallowing, the various diseases that can affect swallowing function, the nature of swallowing dysfunction and ways to assess it, and treatment options for patients with swallowing disorders.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 708 – FLUENCY AND PHONOLOGICAL DISORDERS**

3 credits.

Etiology, definition, diagnosis, and management of fluency and phonological disorders in children and adults.

**Requisites:** Declared in Communication Sciences Disorders MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**CS&D 709 – LANGUAGE DEVELOPMENT AND DISORDERS IN SCHOOL AGE POPULATIONS: SCHOOL METHODS AND PROCEDURES**

3 credits.

Reviews contemporary literature relating to the language development and disorders of school age children and adolescents. Emphasis is on a description of disorders, assessment techniques, and school methods and procedures. Addresses UW-Madison Teacher Education Standards; WI Rules and Statutes, Teaching Standards stipulated in PI 34.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 712 – INTRODUCTION TO CLINICAL METHODS**

1 credit.

Provides learning opportunities to increase knowledge and skills related to assessment and intervention of persons with communication disorders. It is a forum for discussion, reflection and practicing clinical skills.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**CS&D 713 – INTRODUCTION TO MEDICAL SPEECH PATHOLOGY**

1 credit.

Focuses on methods for participating in medical site speech pathology including professionalism, documentation, insurance, ethics, and counseling.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CS&D 714 – SCHOOL METHODS AND PROCEDURES IN SPEECH-LANGUAGE PATHOLOGY**

1 credit.

Focuses on evidence-based practices, assessment and evaluation frameworks, and clinical methods related to school services in speech-language pathology.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**CS&D 752 – CAPSTONE IN COMMUNICATION SCIENCES AND DISORDERS: INTEGRATION OF CLINICAL AND RESEARCH METHODS**

3 credits.

Practice using scientific principles in your daily life and clinical practice; Evaluate scientific evidence as disseminated through multiple channels for use in research and clinical practice; and apply parallel modes of thinking in clinical practice and research.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 790 – PRACTICUM IN COMMUNICATIVE DISORDERS**

1-5 credits.

Supervised experience with persons manifesting communicative problems. Evaluation, rehabilitation, and conservation of hearing, language, and speech disorders in various clinical settings.

**Requisites:** Declared in Communication Sciences Disorders MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CS&D 799 – INDEPENDENT STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CS&D 806 – PROFESSIONAL ISSUES: MEDICAL ISSUES**

1 credit.

Evaluation and management of persons with communication disorders within a medical setting. Information regarding various medical settings, ethics, functional goals, and documentation (e.g. billing, reporting, etc.).

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CS&D 832 – PEDIATRIC AUDIOLOGY**

3 credits.

Study of normal physical, social, cognitive, speech and language and auditory development in children, the causes and effects of childhood hearing loss, hearing screening and the principles of early intervention, and the behavioral and objective assessment of hearing in children.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 833 – OCCUPATIONAL AUDIOLOGY**

2 credits.

Consideration of principles and issues regarding the effects of noise on people, of federal and state regulation of workplace noise, and of the practical aspects of hearing conservation for those exposed to occupational noise, non-occupational noise, or both.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CS&D 834 – COUNSELING IN AUDIOLOGY**

2 credits.

Study of various roles of counseling in the audiologic rehabilitative process, and developing skills and awareness of building a trusting relationship, reflective practice including examining personal biases, conveying diagnostic information, educating and empowering patients, responding to the social-emotional impact of hearing and balance disorders, and examining how diversity, equity, and inclusion intersect with the counseling process.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 835 – CLINICAL RESEARCH METHODS**

3 credits.

Critical analysis of research in speech-language pathology and audiology including theoretical support, research design, statistical levels of measurement, methods of reporting research results, and drawing conclusions from the results.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 836 – PEDIATRIC HABILITATION/REHABILITATION**

3 credits.

Study of the principles and techniques of intervention used with children with hearing loss, including the selection and fitting of amplification, the effect of hearing loss on speech perception, production, and language, communication and educational options, and the habilitation of communication skills.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 845 – THE HUMAN BALANCE SYSTEM: STRUCTURE, ASSESSMENT, AND REHABILITATION**

3 credits.

Study of human balance function with emphasis on the vestibular system, including neurophysiology, testing, and rehabilitation. Clinical experience in electronystagmography (ENG) and videonystagmography (VNG), analysis of results, familiarization with rotational and posturography tests, and treatment techniques are included.

**Requisites:** CS&D 850 and 852

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 846 – THE HUMAN BALANCE SYSTEM: LABORATORY**

1 credit.

Training to perform and analyze the results of electronystagmography (ENG) and videonystagmography (VNG) examinations, and practice the canalith repositioning maneuver. May also include observations of rotational and posturography tests.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 849 – GERIATRIC AUDIOLOGY: DIAGNOSIS AND REHABILITATION**

2 credits.

A study of basic theories of aging, anatomical and physiological effects of aging on the auditory and balance systems, and resulting communication difficulties associated with aging. Emphasizes both the diagnostic and rehabilitative challenges in working with elderly patients.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 850 – HEARING SCIENCE I: BASIC ACOUSTICS AND PSYCHOACOUSTICS**

3 credits.

Study of anatomy and physiology of the human auditory system, with an emphasis on the peripheral system. Basic concepts in psychoacoustics are discussed with reference to the normal and pathological auditory systems.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 852 – HEARING ASSESSMENT**

2 credits.

Bases, purpose, rationale and procedures for tests of auditory function, the importance of understanding auditory function and available evidence as bases for test selection and the importance of the objective(s) of diagnostic procedures.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 853 – HEARING ASSESSMENT LABORATORY**

1 credit.

Focuses on procedures for tests of auditory function, the importance of understanding auditory function and available evidence as bases for test selections and the importance of realizing the objective(s) forming the bases of diagnostic procedures.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 854 – ELECTROACOUSTICS AND INSTRUMENT CALIBRATION**

2 credits.

Systematic review of physical concepts of acoustics and electronics underpinning the practice of audiology, as well as formally adopted standards by which clinical environments, instruments and procedures are calibrated.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 855 – ELECTROACOUSTICS AND CALIBRATION LABORATORY**

1 credit.

Laboratory experience in electroacoustic measurement and calibration of examination spaces, test equipment, and amplification systems pertinent to the practice of audiology.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 856 – AMPLIFICATION SYSTEMS I**

2 credits.

Study of the components and electroacoustic characteristics of hearing aids and assistive listening devices, as well as approaches for selecting the devices and verifying their fitting.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 857 – LABORATORY IN AMPLIFICATION SYSTEMS I**

1 credit.

Testing, fitting, and repairing hearing aids, performing basic hearing aid tests and repairs, proper cerumen removal and ear impression techniques, and using appropriate strategies in fitting. Electroacoustic evaluation and use of probe microphone measures in hearing aid fitting.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 858 – PHYSIOLOGICAL ASSESSMENT IN AUDIOLOGY I**

2 credits.

Study of concepts and procedures in physiological assessment of the auditory system, with emphasis on otoacoustic emissions and auditory brainstem responses. Clinical applications and case studies integrate these recordings with behavioral assessment of the auditory system.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 859 – LABORATORY IN PHYSIOLOGICAL ASSESSMENT OF THE AUDITORY SYSTEM I**

1 credit.

Laboratory experience in the procedures and interpretation of physiological assessment of the auditory system, with the major emphasis on otoacoustic emissions and the auditory brainstem response.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 860 – PHYSIOLOGICAL ASSESSMENT IN AUDIOLOGY II**

2 credits.

Advanced study of physiological measures used by audiologists in threshold and diagnostic evaluations, including acoustic immittance, middle and long latency auditory evoked potentials, and cognitive auditory potentials.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 861 – LABORATORY IN PHYSIOLOGICAL ASSESSMENT OF THE AUDITORY SYSTEM II**

1 credit.

Laboratory experience with hands-on recording and interpreting advanced physiological measures used by audiologists for threshold and diagnostic evaluations. Tests include advanced acoustic immittance, middle and long latency auditory evoked potentials, and cognitive auditory potentials.

Learn to administer and interpret these tests and integrate the findings to form an overall assessment of clinical patients.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 862 – AUDITORY AND VESTIBULAR PATHOLOGIES II**

3 credits.

Major disorders of the auditory and vestibular systems, with an emphasis on differential diagnosis of disorders of the endorgans and neural systems and multisystem disorders. Casual factors, treatment, prognosis, and case studies are included.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 863 – IMPLANTABLE AUDITORY PROSTHESES**

3 credits.

The audiological management of severe to profound hearing loss using implantable auditory prostheses. Focuses on cochlear implants, and provides an introduction to the auditory brainstem implant.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CS&D 865 – PRACTICE MANAGEMENT**

2 credits.

Consideration of non-profit and for-profit practice models with emphasis on organizational structure, legal and tax implications, financial performance, policies and practices of personnel management, marketing strategies, risk management and professional ethics.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 866 – AMPLIFICATION SYSTEMS II**

2 credits.

Strategies for fitting hearing aids, including selection and recommendation, use of prescription gain formulas, and verification of gain. Considerations in geriatric and pediatric hearing aid fitting and ethical issues. Basic techniques in determining patient satisfaction with hearing aids.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 867 – SCHOOL METHODS FOR AUDIOLOGISTS**

1 credit.

Designed to fulfill Wisconsin's Department of Public Instruction (DPI) licensing requirements for audiologists. Application of knowledge and skills in assessment and intervention of hearing related disorders to the public school setting.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CS&D 891 – CLERKSHIP IN AUDIOLOGY I**

1-3 credits.

Hands-on experience focusing on the acquisition of beginning skills in both screening and diagnostic audiology. It provides initial training in the use of audiometric instruments and software, patient interactions, and reporting procedures.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CS&D 892 – CLERKSHIP IN AUDIOLOGY II**

1-3 credits.

Provides the continued development of skills in the assessment of the hearing and implementation of treatment plans across all ages. It also may include assessment of vestibular and peripheral and central auditory systems.

**Requisites:** CS&D 891**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 893 – CLERKSHIP IN AUDIOLOGY III**

1-4 credits.

Provides opportunities to practice skills in settings outside of the university clinics. The goal is to advance all skills to the developing level and perform assessments and treatment with less supervision.

**Requisites:** CS&D 892**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 894 – EXTERNSHIP IN AUDIOLOGY**

2-4 credits.

Continue development of skills in assessment of hearing and implementation of treatment plans across all ages. Hone skills to the mastery level and perform competently with a minimum of supervision.

**Requisites:** CS&D 893**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 899 – CAPSTONE STUDY IN AUDIOLOGY**

1-3 credits.

Independent work on a capstone project under the supervision of a faculty member.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 900 – SEMINAR-SPEECH SCIENCE**

2-3 credits.

Focus varies with staff. Various aspects of physiological and acoustic phonetics and of speech perception.

**Requisites:** Declared in Communication Sciences and Disorders MS or PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 913 – SEMINAR-PROBLEMS IN VOICE DISORDERS**

1-3 credits.

Symptomatology, etiology, diagnosis, and treatment of voice disorders with emphasis on current research procedures and findings and consideration of special problems.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**CS&D 921 – SEMINAR-PROBLEMS IN AUDIOLOGY**

1-3 credits.

Current interests in areas of auditory evaluation, pathology or rehabilitation.

**Requisites:** Declared in Audiology Consortial Program with UW-Stevens Point AUD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 990 – RESEARCH AND THESIS**

1-12 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CS&D 999 – INDEPENDENT STUDIES**

1-3 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



## COMMUNITY AND ENVIRONMENTAL SOCIOLOGY (C&E SOC)

### **C&E SOC/AGROECOL/AGRONOMY/ENTOM/ENVIR ST 103 – AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE**

3 credits.

Agroecology has blossomed across the world in recent decades as not only a science, but also a practice, and a movement. Employ the multiple disciplines and perspectives that Agroecology affords to analyze our agricultural and food systems within a broader context of dynamic social and ecological relationships.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **C&E SOC/SOC 140 – INTRODUCTION TO COMMUNITY AND ENVIRONMENTAL SOCIOLOGY**

4 credits.

Sociological examination of the linkages between the social and biophysical dimensions of the environment. Key topics include community organizing, local food systems, energy transitions, environmental justice, resource dependence, and sustainable development.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **C&E SOC/SOC 210 – SURVEY OF SOCIOLOGY**

3-4 credits.

Introduction to the field of American sociology, its subfields and specialized areas of research, theoretical traditions and research methods.

**Requisites:** Satisfied Communications A requirement. Not open to students with credit for SOC 181 or SOC/C&E SOC/SOC 211

**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **C&E SOC/SOC 211 – THE SOCIOLOGICAL ENTERPRISE**

3 credits.

Basic principles and definitions of sociology. Readings and discussion of the perspectives of sociology, the individual and society, groups and social process, stratification, organizations and power, demography, and social change.

**Requisites:** Not open to students with credit for SOC 181 or SOC/C&E SOC/SOC 210

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **C&E SOC/SOC 222 – FOOD, CULTURE, AND SOCIETY**

3 credits.

Social and cultural dimensions of food production and consumption. Uses historical and cross-cultural analytical frameworks. Treats a wide variety of topics including indigenous, racial, and ethnic foodways, industrialized food systems, sustainable agriculture, movements for food justice.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **C&E SOC/HIST SCI 230 – AGRICULTURE AND SOCIAL CHANGE IN WESTERN HISTORY**

3 credits.

Agricultural practices and social history from prehistoric times to the present. Topics include origins of agriculture, feudalism, agriculture in the Industrial Revolution, farming in America, and the consequences of the Green Revolution.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### **C&E SOC/SOC 245 – TECHNOLOGY AND SOCIETY**

3 credits.

Covers technology, the social forces shaping its development, and social impacts of its adoption. Examine one's assumptions about technology and its relationship to society.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**C&E SOC/F&W ECOL/SOC 248 – ENVIRONMENT, NATURAL RESOURCES, AND SOCIETY**

3 credits.

Introduces the concerns and principles of sociology through examination of human interaction with the natural environment. Places environmental issues such as resource depletion, population growth, food production, environmental regulation, and sustainability in national and global perspectives.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**C&E SOC/HISTORY/POLI SCI/SOC 259 – FORWARD? THE WISCONSIN IDEA, PAST AND PRESENT**

1-3 credits.

Engage in ongoing reflection and dialogue on the Wisconsin Idea and how it informs the mission of the University of Wisconsin. Consider the Wisconsin Idea as it has developed since its beginnings, with a focus on what it means today and what it can mean in the future.

**Requisites:** Junior or senior standing only**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**C&E SOC/AFROAMER/ANTHRO/GEOG/HISTORY/LACIS/ POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**C&E SOC 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area of Community and Environmental Sociology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**C&E SOC 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area of Community and Environmental Sociology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**C&E SOC/A A E/SOC 340 – ISSUES IN FOOD SYSTEMS**

3-4 credits.

With primary emphasis on the U.S., the course covers social, economic and biological dimensions of food systems. Using classroom and community experience, the course combines academic approaches with practitioner knowledge. A community project is required.

**Requisites:** SOC/C&E SOC 140, CE SOC/SOC 181, 210, or 211**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**C&E SOC/SOC 341 – LABOR IN GLOBAL FOOD SYSTEMS**

3 credits.

Overview of our current food system and how new technologies and globalization are reshaping it, focusing especially on the implications for workers throughout the food chain. Learn about the ways that social movements are working to reshape commodity chains by promoting local production, fair trade, and labor justice.

**Requisites:** 3 credits in CE SOC or SOC**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**C&E SOC/SOC 343 – SOCIOLOGY OF HEALTH AND MEDICINE**

3 credits.

Social, cultural, and structural factors in shaping definitions of health and illness, distribution of disparate health outcomes, and the organization of health professions and healthcare.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**C&E SOC/SOC 357 – METHODS OF SOCIOLOGICAL INQUIRY**

3-4 credits.

Scientific methods in the study of society; procedures for testing sociological theory: problem definition, hypothesis construction, collection and evaluation of data. Practical experience conducting small research projects.

**Requisites:** Sophomore standing or (SOC 181, CE SOC/SOC/ C&E SOC 140, 210, or 211)

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**C&E SOC/SOC 360 – STATISTICS FOR SOCIOLOGISTS I**

4 credits.

Presentation of sociological data; descriptive statistics; probability theory and statistical inference; estimation and tests of hypotheses; regression and correlation and the analysis of contingency tables.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**C&E SOC/SOC 361 – STATISTICS FOR SOCIOLOGISTS II**

4 credits.

Applied linear regression modeling for social scientists. Bivariate and multiple regression, dummy variables, interactions, nonlinear relationships, indirect effects and omitted variable bias, outliers, heteroskedasticity, and multicollinearity; associated diagnostics and corrections. Use of Stata and/ or SAS for dataset creation and analysis.

**Requisites:** SOC/C&E SOC/SOC 360, ECON 310, PSYCH 210, GEOG 360, STAT/MATH/STAT 310, STAT 301, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**C&E SOC/SOC 365 – DATA MANAGEMENT FOR SOCIAL SCIENCE RESEARCH**

3-4 credits.

Understanding the structure of different types of social scientific data, techniques for data evaluation, cleaning, documentation and visual display, merging data from multiple sources, restructuring data for analysis.

**Requisites:** SOC/C&E SOC/SOC 360, PSYCH 210, STAT 301, ECON 310, STAT/MATH/STAT 310, or GEOG 360

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**C&E SOC 375 – SPECIAL TOPICS**

1-4 credits.

Specialized topics in community and environmental sociology. In-depth investigation into the sociological aspects of a variety of community and environmental issues, such as globalization, climate change, social and environmental sustainability, technology.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Community and Environmental Sociology and internship site supervisor. Students are responsible for arranging the work and credits with the UW-Madison instructor and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC 400 – STUDY ABROAD IN COMMUNITY AND ENVIRONMENTAL SOCIOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**C&E SOC/CURRIC/ENVIR ST 405 – EDUCATION FOR SUSTAINABLE COMMUNITIES**

3 credits.

How can education - for children and adults, in school and out - help to address crucial environmental and social sustainability challenges? What ideas and strategies have guided environmental and sustainability education over the years? What can individual people do to address environmental challenges, and what can only be accomplished by people working together? What does sustainability have to do with justice - and vice versa? Examine the principles behind behavior change and empowerment, community action and whole-scale social reform. Drawing on research and theory from across the social sciences, we will explore the uncertain relationship between education and advocacy, seeking the means by which education can have the greatest impact without compromising the core ideals of a democratic society.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**C&E SOC/ENVIR ST/GEOG 434 – PEOPLE, WILDLIFE AND LANDSCAPES**

3 credits.

Explores the relationship between humans and wildlife amid diverse landscapes, both historic and contemporary, tropical and temperate. Investigates how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**C&E SOC/SOC 475 – CLASSICAL SOCIOLOGICAL THEORY**

3 credits.

Classical theory; Marx, Durkheim, Weber, and other important classical theorists and schools of thought.

**Requisites:** Sophomore standing or (SOC 181, CE SOC/SOC/ C&E SOC 140, 210, or 211)**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**C&E SOC 500 – CAPSTONE EXPERIENCE**

3 credits.

A capstone experience involving the application of sociological concepts and methods to concrete social and environmental problems. Involves working in teams, engaging in problems using approaches such as service learning, community based research, and interdisciplinary approaches.

**Requisites:** Senior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**C&E SOC/SOC 532 – HEALTH CARE ISSUES FOR INDIVIDUALS, FAMILIES AND SOCIETY**

3 credits.

Issues related to health and health care delivery in our society. Topics include social, cultural and ethical influences on consumer definitions of health and use of medical care, and on the health care system's responses.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**C&E SOC/SOC 533 – PUBLIC HEALTH IN RURAL & URBAN COMMUNITIES**

3 credits.

Sociological approaches to community, rural, and public health. Examines epidemiological evidence for and policy solutions to health issues that impact vulnerable populations in diverse geographic and social settings.

Topics include mental health, environmental and occupational health, preventive care, substance abuse.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**C&E SOC/ENVIR ST/SOC 540 – SOCIOLOGY OF INTERNATIONAL DEVELOPMENT, ENVIRONMENT, AND SUSTAINABILITY**

3 credits.

Sociological analysis of relationships among economic growth, environmental sustainability and social justice in the developing world.

Considers frameworks for understanding poverty, hunger, educational and technological inequality, and the impact of globalization on prospects for socially and ecologically sustainable development.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**C&E SOC/SOC 541 – ENVIRONMENTAL STEWARDSHIP AND SOCIAL JUSTICE**

3 credits.

Application of sociological theory and analysis to environmental issues. Examines the ways in which environmental stewardship and conflict are embedded within broader cultural, social, and political contexts.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, 211, SOC/CE SOC/F&W ECOL/C&E SOC/SOC 248, ENVIR ST 112, 113, ENVIR ST/ GEOG/ENVIR ST 139, 337, 339, GEOG 101, or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **C&E SOC/AGRONOMY/MED HIST/PHILOS 565 – THE ETHICS OF MODERN BIOTECHNOLOGY**

3 credits.

An in-depth study of a selection of ethical issues arising from the application of modern biotechnology to microorganisms, plants, non-human animals, and human beings. We will aim at a discussion that is informed by empirical research and by work done in ethical theory, political philosophy, and other relevant disciplines, and whose character is rigorous, clear, nuanced, and unbiased.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **C&E SOC/SOC 573 – COMMUNITY ORGANIZATION AND CHANGE**

3 credits.

Examines theories of community change and different models of community organizing.

**Requisites:** Junior standing or (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **C&E SOC/AMER IND/SOC 578 – POVERTY AND PLACE**

3 credits.

The allocation of economic and social rewards in the United States; emphasis on persistently poor regions and communities; analysis of selected minority groups and their poverty statuses; poverty programs and their consequences for structural and cultural changes.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, or SOC 181

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **C&E SOC/SOC/URB R PL 617 – COMMUNITY DEVELOPMENT**

3 credits.

Social, cultural and personality factors influencing community development, with reference to developing countries as well as contemporary rural communities; consideration of theoretical and operational issues.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **C&E SOC/SOC 618 – SOCIAL NETWORK ANALYSIS**

3 credits.

Social network analysis is a social scientific approach examining individuals as embedded in networks of social relations. Covers the fundamentals of network thinking, network tools, and the analysis and presentation of social network data. Direct practice with network data using software R.

**Requisites:** Junior standing and (SOC/C&E SOC/SOC 360, STAT 301, STAT 371, ECON 310, PSYCH 210, GEOG 360, MATH/STAT/MATH 310, or GEN BUS 303)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **C&E SOC/SOC 630 – SOCIOLOGY OF DEVELOPING SOCIETIES/THIRD WORLD**

3 credits.

Review of problems and prospects of so-called "developing societies." Includes theory of economic/social development, political economic organizations of "developing" societies, history of colonialism/imperialism, attempts to industrialize and results of those attempts.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **C&E SOC/SOC/URB R PL 645 – MODERN AMERICAN COMMUNITIES**

3 credits.

Relevance of the concept of community to American society. Review of several basic theories of community and analysis of the nature of community in the broader political and economic context.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **C&E SOC/SOC 650 – SOCIOLOGY OF AGRICULTURE**

3 credits.

Introduction to sociology of agriculture in advanced industrial-capitalist societies, including theoretical, historical, and empirical issues of agriculture in the United States.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**C&E SOC/SOC 652 – SOCIOLOGY OF ECONOMIC INSTITUTIONS**

3 credits.

Sociological perspectives on the organization of the firm, financial markets, and work, intermediate associations (unions, ethnic economies), the state, and the international economy. Contrast between neoclassical, traditional institutionalist, post-fordist, and neo-fordist perspectives on the nature and evolution of these institutions.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**C&E SOC/SOC 676 – APPLIED DEMOGRAPHY: PLANNING AND POLICY**

3 credits.

Introduction to demographic concepts, methods, data, and trends for application in business, government, planning and other applied areas. Emphasis on U.S. census data and their uses.

**Requisites:** (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211) and CE SOC/SOC/C&E SOC 357**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**C&E SOC 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for undergraduate students in an Honors program completing a thesis in the area of Community and Environmental Sociology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**C&E SOC 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Community and Environmental Sociology, as arranged with a faculty member.  
C&E SOC 681

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2020**C&E SOC 691 – SENIOR THESIS**

2 credits.

Individual study for undergraduate students completing a thesis in the area of Community and Environmental Sociology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**C&E SOC 692 – SENIOR THESIS**

2 credits.

Second semester of individual study for undergraduate students completing a thesis in the area of Community and Environmental Sociology, as arranged with a faculty member. C&E SOC 691

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2019**C&E SOC/SOC 693 – PRACTICUM IN ANALYSIS AND RESEARCH**

3 credits.

Practical experience in techniques of social research through assignment to a research project for the semester. Focuses on the art and practice of research and the writing of research reports.

**Requisites:** CE SOC/SOC/C&E SOC 357, 361 and declared in Sociology: Concentration in Analysis and Research**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**C&E SOC 699 – SPECIAL PROBLEMS**

1-4 credits.

Individual advanced work in an area of Community and Environmental Sociology under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**C&E SOC/ISYE/NE/SOC 708 – SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS**

3 credits.

Issues involved in decision-making regarding technological risks and risk management in areas such as nuclear power, hazardous waste disposal, and pollution control. Risk perception and cognitive biases; risk analysis and decision analysis; political issues in risk management; regulatory mechanisms; and risk communication. Selected case studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**C&E SOC/SOC 724 – INTERMEDIATE POLITICAL SOCIOLOGY**

3 credits.

Critical examination of theories and research in political sociology. Topics include: power and interests, state-formation, social movements, class and political behavior, revolutions, ideology, and states and social policy.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2013



### **C&E SOC/SOC 730 – INTERMEDIATE SOCIAL PSYCHOLOGY: THE INDIVIDUAL AND SOCIETY**

3 credits.

Major social psychological theories and research that focus on the individual in social context. Topics include: perspectives on socialization, the self, social perception and attribution, attitudes, language and nonverbal communication, and attraction and relationships.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **C&E SOC/SOC 731 – INTERMEDIATE SOCIAL PSYCHOLOGY: GROUP AND COLLECTIVE PROCESSES**

3 credits.

Major social psychological theories and research that focus on interpersonal relations and group processes. Topics include: social interaction (influence, self-presentation, altruism, aggression), groups (cohesion, conformity, leadership, problem-solving, decision making), intergroup relations (conflict, stereotypes), n-person games (dilemmas, coalition formation).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### **C&E SOC/SOC 750 – RESEARCH METHODS IN SOCIOLOGY**

3 credits.

Application of scientific methods to the analysis of social phenomena; methodological orientations in sociology; types of research procedure; nature of sociological variables.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **C&E SOC/ED POL/SOC 755 – METHODS OF QUALITATIVE RESEARCH**

3 credits.

Introduces qualitative, or ethnographic, research methods, emphasizing those suitable for educational and other organizational settings. Considers strengths and limitations of qualitative approaches in relation to varied research problems. Explores methodological procedures from entry into the field through writing.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### **C&E SOC/SOC 875 – SPECIAL TOPICS**

1-4 credits.

Advanced topics in sociology. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **C&E SOC/GEN&WS/SOC 904 – SOCIOLOGICAL PERSPECTIVES ON GENDER**

3 credits.

Advanced topics in the analysis of gender relations in society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **C&E SOC/SOC 913 – SEMINAR-SOCIAL CHANGE**

3 credits.

Advanced study of current research in social change, e.g., democratization in the Global South, labor movements, urban protests, social media campaigns.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

### **C&E SOC/SOC 922 – SEMINAR-RACE AND ETHNIC RELATIONS**

3 credits.

Theoretical, methodological, and current research problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **C&E SOC/SOC 923 – SEMINAR-SOCIAL STRATIFICATION**

3 credits.

Advanced study of current research in social stratification, e.g., historical and comparative studies of inequality; mathematical and econometric modeling of mobility and achievement processes; demographic approaches to power and inequality.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**C&E SOC/ANTHRO/ECON/SOC 925 – SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS**

2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC/SOC 929 – SEMINAR: CLASS ANALYSIS AND HISTORICAL CHANGE**

3 credits.

Selected topics in Marxist theory and research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**C&E SOC/SOC 940 – SEMINAR-SOCIOLOGY OF ECONOMIC CHANGE**

3 credits.

Theoretical and technical problems in research concerning organizational and socio-psychological aspects of changes in large scale social systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**C&E SOC/SOC 945 – SEMINAR-RURAL SOCIOLOGY**

3 credits.

Theory and research in alternate semesters in rural aspects of population, stratification, social change, and groups and institutions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**C&E SOC/SOC 948 – SEMINAR: ENVIRONMENTAL SOCIOLOGY**

3 credits.

Examines topics such as theories of environment and society, the treadmill of production, environmental movements, political ecology, environmental justice, consumption, ecological modernization, sustainability, environmental risk, and the sociology of environmental science.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**C&E SOC/SOC 960 – SEMINAR-CURRENT METHODOLOGICAL ISSUES IN SOCIAL PSYCHOLOGY**

3 credits.

Alternative research designs and processes, measurement, and analytical techniques in social psychology; experience in developing and utilizing research plans and techniques.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**C&E SOC/SOC 965 – SEMINAR-RECENT DEVELOPMENTS IN SOCIAL PSYCHOLOGY**

3 credits.

Current literature, emphasis on recent journal articles.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**C&E SOC/SOC 971 – SEMINAR-TOPICS IN DEMOGRAPHY AND ECOLOGY**

3 credits.

Advanced study of selected topics related to population and society, including health and inequality across the life course, environmental and spatial demography, biodemography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**C&E SOC/SOC 972 – SEMINAR IN POPULATION AND DEVELOPMENT**

3 credits.

Examine current issues in population and development using conceptual tools of sociology and demography. Critique the motivations of agents and institutions involved in creating population policies and will evaluate the empirical evidence linking population processes and international development in its varied forms. Focus on the impact of international population priorities on the current relationship between population and development, with particular attention to gender, poverty, and health.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**C&E SOC/SOC 977 – SEMINAR-HUMAN ECOLOGY**

3 credits.

Review of ecological theory and research; critical assessment of the ecological complex (population, organization, environment, and technology); problems of measurement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**C&E SOC/A A E/ANTHRO/GEOG/HISTORY/LACIS/POLI SCI/PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**C&E SOC/SOC 985 – RESEARCH: COMMUNITY AND ENVIRONMENTAL SOCIOLOGY**

1-3 credits.

Critical analysis of recent theoretical and methodological issues through presentations of research in progress.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC/SOC 987 – RESEARCH: RACE AND ETHNIC STUDIES**

1-3 credits.

Analysis of recent research and theory, based on reviews of literature and presentations of research in progress.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC 990 – RESEARCH**

1-12 credits.

Independent graduate research under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC/SOC 993 – RESEARCH: SOCIOLOGY OF ECONOMIC CHANGE TRAINEES**

1-3 credits.

Presentations of research in progress concerning social and economic change in developing countries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC/SOC 995 – RESEARCH: METHODOLOGY TRAINEES**

1-3 credits.

Workshop on social science research methods and professional development, e.g. ethics, communication, data management, novel research methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC/SOC 997 – RESEARCH: DEMOGRAPHY AND ECOLOGY TRAINEES**

1-3 credits.

Interdisciplinary training workshop on current research in population science from scholars at research and teaching institutions around the world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**C&E SOC 999 – READING AND RESEARCH**

1-3 credits.

Independent graduate research under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

## COMPARATIVE BIOSCIENCES (COMP BIO)

### COMP BIO 500 – FUNDAMENTAL PRINCIPLES OF VETERINARY ANATOMY

5 credits.

A detailed consideration of gross anatomical structure with emphasis on major anatomical patterns present in species important to veterinary medicine. The dog is used as a model domestic mammal and comparisons with other species are considered. All body systems are dissected. Clinical implications of these dissections are emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### COMP BIO 501 – VETERINARY HISTOLOGY

5 credits.

Light and digital microscopy are used to study the anatomy of organs and tissues at the cellular level. Microanatomic features of all major organ systems are identified, and pertinent physiologic concepts are discussed to correlate structure with function. Mammalian systems are emphasized, and comparisons to non-mammalian species are considered. Direct applications to clinical medicine are included.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### COMP BIO 502 – MOLECULAR AND METABOLIC BASIS OF MEDICINE

3 credits.

Covers metabolism with a more advanced incorporation of concepts of chemistry, cell biology and physiology. Clinical correlations in veterinary medicine are also covered.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP BIO 503 – VETERINARY DEVELOPMENTAL ANATOMY

2 credits.

Principles of development and organogenesis in domestic animals. Normal developmental patterns are related to adult anatomy. Clinical implications of common congenital defects are discussed.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### COMP BIO 505 – VETERINARY NEUROANATOMY AND NEUROPHYSIOLOGY

3 credits.

A comparative approach to the morphological and physiological properties of the central nervous system of animals, particularly those of veterinary importance.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### COMP BIO 506 – VETERINARY PHYSIOLOGY B

4 credits.

Covers comparative veterinary physiology covering digestive, endocrine, and reproductive systems.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP BIO 550 – ANATOMY OF THE LARGE DOMESTIC ANIMALS

1-3 credits.

A dissection study of the horse and the ox with special emphasis on the anatomical specializations of these species. Extensive comparisons to the anatomy of the small domestic animals. Other large domestic animals will be considered as appropriate to demonstrate anatomical variation.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP BIO 551 – VETERINARY PHYSIOLOGY A

4 credits.

Covers comparative veterinary physiology covering electrophysiology, and muscle, cardiovascular, respiratory, renal and acid-base physiology.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### COMP BIO 555 – VETERINARY TOXICOLOGY

2 credits.

Science of toxicology as it relates to veterinary practice. The principles of toxicology and the mechanism and treatment of toxicants commonly encountered in small and large animals will be presented.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP BIO 556 – VETERINARY PHARMACOLOGY**

4 credits.

Basic pharmacology of various drug classes used in veterinary medicine together with examples of clinical drug use. Important species variations in drug use and drug response will be stressed.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP BIO 675 – SPECIAL TOPICS**

1-5 credits.

**Requisites:** Declared in Doctor of Veterinary Medicine

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**COMP BIO 699 – DIRECTED STUDY**

1-5 credits.

Projects in the laboratory and/or through library work in specific subject area under the direct guidance of faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP BIO 775 – EXTERNSHIP**

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP BIO 990 – RESEARCH**

1-12 credits.

Research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## COMPARATIVE LITERATURE (COMP LIT)

**COMP LIT 201 – INTRODUCTION TO PRE-MODERN LITERATURES/IMPACT ON THE MODERN WORLD**

3 credits.

Critical study of pre-modern literatures from the ancient worlds to the Middle Ages; broad survey covering many national literatures, stressing cross-cultural literary relations and their impact on the modern world.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP LIT 202 – INTRODUCTION TO MODERN AND CONTEMPORARY LITERATURE**

3 credits.

Critical study of modern literature, from the 15th century to the 20th century; broad survey covering many national literatures, stressing cross-cultural literary relations and including emergent literatures.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COMP LIT 203 – INTRODUCTION TO CROSS-CULTURAL LITERARY FORMS**

3 credits.

Introduction to the critical study of specific literary forms (e.g., comedy, short story) and the connections between literary forms and other cultural and artistic phenomena (e.g., cinema, TV, music, visual arts).

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP LIT 350 – PROBLEMS IN COMPARATIVE LITERATURES AND CULTURES**

3-4 credits.

Comparative study – historical, theoretical, critical – of literatures and literary studies in their interaction with cultural themes, with social formations, with seminal concepts and ideas, with non-literary disciplines as they inform reading and analysis of literature.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP LIT 358 – PROBLEMS IN TRANSNATIONAL GENRE AND MODE**

3-4 credits.

Comparative study of the nature and substance of genre distinctions; relations between genre and mode in diverse literatures; critical analysis of texts in the context of literary distinctions of genre and mode – with attention to cross-cultural, transnational and historical perspectives.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP LIT 370 – COMPARATIVE PROBLEMS IN PERIODS AND MOVEMENTS**

3-4 credits.

Comparative study of literatures of historical periods, international and inter-linguistic relations, flux of ideas, forms, styles; literary movements and trends, principles linking literary texts, their diversity and variation, their connection to relevant debates in aesthetics, philosophy, or other fields.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**COMP LIT 475 – POETICS AND LITERARY THEORY**

3-4 credits.

Study of the changes and development of the systematics, theoretics, and mechanics of literary form and utterance.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**COMP LIT 500 – THE COMPARATIVE IN AND BEYOND COMPARATIVE LITERATURE**

3 credits.

Topics will vary and cover a wide range of comparative topics – literary, cultural, philosophical, historical, legal – with connections to traditional disciplines of comparativist faculty.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**COMP LIT 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**COMP LIT 750 – PROBLEMS IN COMPARATIVE LITERATURES AND CULTURES**

3 credits.

Comparative study – historical, theoretical, critical – of literatures and literary studies in their interaction with cultural themes, with social formations, with seminal concepts and ideas, with non-literary disciplines as they inform reading and analysis of literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP LIT 990 – RESEARCH AND THESIS**

1-12 credits.

Advanced level mentored reading and research for students with dissertator status

**Requisites:** Consent of instructor**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



# COMPUTER SCIENCES (COMP SCI)

## COMP SCI/L I S 102 – INTRODUCTION TO COMPUTING

3 credits.

Provides a broad overview of computing at an introductory level, including topics such as security, robotics, and artificial intelligence. Increases understanding of how computers work and how algorithms solve problems. Design and implement creative applications in an introductory coding environment. Provides a broad overview of computing and algorithms without an emphasis on programming.

**Requisites:** MATH 096 or placement into MATH 141. MATH 118 does not fulfill the prerequisite. Not open to students with credit for COMP SCI 300 or 320

**Course Designation:** Gen Ed – Quantitative Reasoning Part A  
Breadth – Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COMP SCI 200 – PROGRAMMING I

3 credits.

Learn the process of incrementally developing small (200-500 lines) programs along with the fundamental Computer Science topics. These topics include: problem abstraction and decomposition, the edit-compile-run cycle, using variables of primitive and more complex data types, conditional and loop-based flow control, basic testing and debugging techniques, how to define and call functions (methods), and IO processing techniques. Also teaches and reinforces good programming practices including the use of a consistent style, and meaningful documentation. Intended for students who have no prior programming experience.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COMP SCI 220 – DATA SCIENCE PROGRAMMING I

4 credits.

Introduction to Data Science programming using Python. No previous programming experience required. Emphasis on analyzing real datasets in a variety of forms and visual communication.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement or declared in the Professional Capstone Program in Computer Sciences. Not open to students with credit for COMP SCI 301.

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COMP SCI/MATH 240 – INTRODUCTION TO DISCRETE MATHEMATICS

3 credits.

Basic concepts of logic, sets, partial order and other relations, and functions. Basic concepts of mathematics (definitions, proofs, sets, functions, and relations) with a focus on discrete structures: integers, bits, strings, trees, and graphs. Propositional logic, Boolean algebra, and predicate logic. Mathematical induction and recursion. Invariants and algorithmic correctness. Recurrences and asymptotic growth analysis. Fundamentals of counting.

**Requisites:** MATH 217, 221, or 275

**Course Designation:** Breadth – Natural Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COMP SCI/E C E 252 – INTRODUCTION TO COMPUTER ENGINEERING

3 credits.

Logic components built with transistors, rudimentary Boolean algebra, basic combinational logic design, basic synchronous sequential logic design, basic computer organization and design, introductory machine- and assembly-language programming.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## COMP SCI 270 – FUNDAMENTALS OF HUMAN-COMPUTER INTERACTION

3 credits.

User-centered software design including principles and methods for understanding user needs, designing and prototyping interface solutions, and evaluating their usability covered through lectures and hands-on in-class activities. Meets with COMP SCI 570.

**Requisites:** Not open to students with credit for COMP SCI 570

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

## COMP SCI 298 – DIRECTED STUDY IN COMPUTER SCIENCE

1-3 credits.

Undergraduate directed study in computer sciences.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP SCI 300 – PROGRAMMING II**

3 credits.

Introduction to Object-Oriented Programming using classes and objects to solve more complex problems. Introduces array-based and linked data structures: including lists, stacks, and queues. Programming assignments require writing and developing multi-class (file) programs using interfaces, generics, and exception handling to solve challenging real world problems. Topics reviewed include reading/writing data and objects from/to files and exception handling, and command line arguments. Topics introduced: object-oriented design; class vs. object; create and define interfaces and iterators; searching and sorting; abstract data types (List, Stack, Queue, PriorityQueue(Heap), Binary Search Tree); generic interfaces (parametric polymorphism); how to design and write test methods and classes; array based vs. linked node implementations; introduction to complexity analysis; recursion.

**Requisites:** Satisfied QR-A and (COMP SCI 200, 220, 302, 310, 301, or placement into COMP SCI 300) or (COMP SCI/E C E/COMP SCI 252 and E C E 203); graduate/professional standing; declared in Capstone Certificate in COMP SCI. Not open to students with credit for COMP SCI 367.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 304 – WES-CS GROUP MEETING**

0-1 credits.

Small group meetings for Wisconsin Emerging Scholars - Computer Science (WES-CS) students. Meets in small groups to work together on problems related to the COMP SCI 200 course material. For information about WES-CS membership, contact the computer sciences department.

**Requisites:** Concurrent enrollment in COMP SCI 200 and member of Wisconsin Emerging Scholars program in Computer Science

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 310 – PROBLEM SOLVING USING COMPUTERS**

3 credits.

Gives students an introduction to computer and analytical skills to use in their subsequent course work and professional development. Discusses several methods of using computers to solve problems, including elementary programming techniques, symbolic manipulation languages, and software packages. Techniques will be illustrated using sample problems drawn from elementary engineering. Emphasis is on introduction of algorithms with the use of specific tools to illustrate the methods.

**Requisites:** MATH 222, graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COMP SCI 319 – DATA SCIENCE PROGRAMMING I FOR RESEARCH**

3 credits.

Introduction to Data Science programming using Python. In addition to a survey of programming basics (control flow and data structures), web scraping, database queries, and tabular analysis will be introduced. Projects will emphasize analyzing real datasets in a variety of forms and visual communication using plotting tools. Similar to COMP SCI 220 but the pedagogical style of the projects will be adapted to graduate students in fields other than computer science and data science. No previous programming experience required.

**Requisites:** Graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 320 – DATA SCIENCE PROGRAMMING II**

4 credits.

Intermediate approach to Data Science programming using Python. Experience with basic tabular analysis in Python is assumed. Learn to implement data structures (e.g., graphs) to efficiently represent datasets. Software-engineering tools such as version control and Python virtual environments will be introduced, with an emphasis on reproducibility of analysis. Tracing and A/B testing will be introduced as techniques for generating meaningful datasets. Introduces basic classification, clustering, optimization, and simulation techniques. Plotting and visual communication will be emphasized throughout the course.

**Requisites:** COMP SCI 220 (or COMP SCI 301 prior to Spring 2020), COMP SCI 300, 319, graduate/professional standing, or declared in the Computer Sciences for Professionals Capstone Certificate

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/E C E 352 – DIGITAL SYSTEM FUNDAMENTALS**

3 credits.

Logic components, Boolean algebra, combinational logic analysis and synthesis, synchronous and asynchronous sequential logic analysis and design, digital subsystems, computer organization and design.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and COMP SCI/E C E/COMP SCI 252

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI/E C E 354 – MACHINE ORGANIZATION AND PROGRAMMING

3 credits.

An introduction to fundamental structures of computer systems and the C programming language with a focus on the low-level interrelationships and impacts on performance. Topics include the virtual address space and virtual memory, the heap and dynamic memory management, the memory hierarchy and caching, assembly language and the stack, communication and interrupts/signals, compiling and assemblers/linkers.

**Requisites:** COMP SCI/E C E/COMP SCI 252 and (COMP SCI 300 or 302) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 368 – LEARNING A PROGRAMMING LANGUAGE

1 credit.

For students interested in learning a particular programming language. Focuses on a specific language offered at one of three levels: beginner, intermediate, and advanced. Students may repeat the course if the topic title is different.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### COMP SCI 400 – PROGRAMMING III

3 credits.

The third course in our programming fundamentals sequence. It presumes that students understand and use functional and object-oriented design and abstract data types as needed. This course introduces balanced search trees, graphs, graph traversal algorithms, hash tables and sets, and complexity analysis and about classes of problems that require each data type. Students are required to design and implement using high quality professional code, a medium sized program, that demonstrates knowledge and use of latest language features, tools, and conventions. Additional topics introduced will include as needed for projects: inheritance and polymorphism; anonymous inner classes, lambda functions, performance analysis to discover and optimize critical code blocks. Students learn about industry standards for code development. Students will design and implement a medium size project with a more advanced user-interface design, such as a web or mobile application with a GUI and event-driven implementation; use of version-control software.

**Requisites:** COMP SCI 300, graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 402 – INTRODUCING COMPUTER SCIENCE TO K-12 STUDENTS

2 credits.

Work in teams to lead Computer Science clubs and workshops for K-12 students at sites in the Madison area. Design and lead activities to help K-12 students learn computational thinking and computer programming.

**Requisites:** COMP SCI 200, 220, 300, 301, 302, 310, 367, placement into COMP SCI 300, or COMP SCI/L I S/COMP SCI 102 (COMP SCI 202 prior to Fall 2023), graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI/STAT 403 – INTERNSHIP COURSE IN COMP SCI AND DATA SCIENCE

1 credit.

Enables students with outside internships to earn academic credit connected to their work experience related to the Computer Sciences or Data Science programs.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

### COMP SCI 407 – FOUNDATIONS OF MOBILE SYSTEMS AND APPLICATIONS

3 credits.

Design and implementation of applications, systems, and services for mobile platforms with (i) constraints, such as limited processing, memory, energy, interfaces, variable bandwidth, and high mobility, and (ii) features, such as touchscreens, cameras, electronic compasses, GPS, and accelerometers.

**Requisites:** (COMP SCI 300 or 367), graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### COMP SCI 412 – INTRODUCTION TO NUMERICAL METHODS

3 credits.

Interpolation, solution of linear and nonlinear systems of equations, approximate integration and differentiation, numerical solution of ordinary differential equations, Data fitting (such as least squares) by polynomials and splines. Knowledge of matrix algebra recommended, such as MATH 340.

**Requisites:** MATH 222 and (COMP SCI/MATH/COMP SCI 240 or MATH 234) and (COMP SCI 200, 300, 301, 302, 310, or placement into COMP SCI 300) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI/I SY E/MATH 425 – INTRODUCTION TO COMBINATORIAL OPTIMIZATION**

3 credits.

Focuses on optimization problems over discrete structures, such as shortest paths, spanning trees, flows, matchings, and the traveling salesman problem. We will investigate structural properties of these problems, and we will study both exact methods for their solution, and approximation algorithms.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**COMP SCI/E C E/MATH 435 – INTRODUCTION TO CRYPTOGRAPHY**

3 credits.

Cryptography is the art and science of transmitting digital information in a secure manner. Provides an introduction to its technical aspects.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/STAT 471 – INTRODUCTION TO COMPUTATIONAL STATISTICS**

3 credits.

Classical statistical procedures arise where closed-form mathematical expressions are available for various inference summaries (e.g. linear regression; analysis of variance). A major emphasis of modern statistics is the development of inference principles in cases where both more complex data structures are involved and where more elaborate computations are required. Topics from numerical linear algebra, optimization, Monte Carlo (including Markov chain Monte Carlo), and graph theory are developed, especially as they relate to statistical inference (e.g., bootstrapping, permutation, Bayesian inference, EM algorithm, multivariate analysis).

**Requisites:** MATH/STAT/MATH 310 and (STAT 333 or 340), graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**COMP SCI/MATH/STAT 475 – INTRODUCTION TO COMBINATORICS**

3 credits.

Problems of enumeration, distribution, and arrangement. Inclusion-exclusion principle. Generating functions and linear recurrence relations. Combinatorial identities. Graph coloring problems. Finite designs. Systems of distinct representatives and matching problems in graphs. Potential applications in the social, biological, and physical sciences. Puzzles. Problem solving.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/CURRIC 502 – THEORY AND PRACTICE IN COMPUTER SCIENCE EDUCATION**

1 credit.

Computer science educational pedagogy and general teaching practices. Practical experience gained through tutoring students. Knowledge of object-oriented programming required.

**Requisites:** COMP SCI 300 or 302 or declared in Computer Science graduate program

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/E C E 506 – SOFTWARE ENGINEERING**

3 credits.

Ideas and techniques for designing, developing, and modifying large software systems. Topics include software engineering processes; requirements and specifications; project team organization and management; software architectures; design patterns; testing and debugging; and cost and quality metrics and estimation. Students will work in large teams on a substantial programming project.

**Requisites:** (COMP SCI 367 or 400) and (COMP SCI 407, 536, 537, 545, 559, 564, 570, 679 or COMP SCI/E C E/COMP SCI 552) or graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/MATH 513 – NUMERICAL LINEAR ALGEBRA**

3 credits.

Direct and iterative solution of linear and nonlinear systems and of eigenproblems. LU and symmetric LU factorization. Complexity, stability, and conditioning. Nonlinear systems. Iterative methods for linear systems. QR-factorization and least squares. Eigenproblems: local and global methods.

**Requisites:** (MATH 340, 341, or 375) and (COMP SCI 200, 300, 301, 302, 310, or placement into COMP SCI 300) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/MATH 514 – NUMERICAL ANALYSIS**

3 credits.

Polynomial forms, divided differences. Polynomial interpolation. Polynomial approximation: uniform approximation and Chebyshev polynomials, least-squares approximation and orthogonal polynomials. Numerical differentiation and integration. Splines, B-splines and spline approximation. Numerical methods for solving initial and boundary value problems for ordinary differential equations.

**Requisites:** (MATH 320, 340, 341, or 375), (MATH 322, 376, 421, or 521), and (COMP SCI 200, 220, 300, 310, or 301 prior to Spring 2020, or placement into COMP SCI 300); grad/professional standing; member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/DS/ISYE 518 – WEARABLE TECHNOLOGY**

3 credits.

Gives students hands-on experience in building wearable computing platforms. Designed for students who have a background in textiles and apparel design, computer science, engineering or media arts. By the completion of the course students will have fundamental knowledge of electronic circuitry, programming, and "maker skills".

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 520 – INTRODUCTION TO THEORY OF COMPUTING**

3 credits.

Basics about the notion, capabilities, and limitations of computation: elements of finite automata and regular languages, computability theory, and computational complexity theory. Additional topics include context-free grammars and languages, and complexity-theoretic cryptography.

**Requisites:** (COMP SCI/MATH/COMP SCI 240 or COMP SCI/MATH/STAT/COMP SCI/MATH 475) and (COMP SCI 367 or 400), or graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COMP SCI/ECE/ISYE 524 – INTRODUCTION TO OPTIMIZATION**

3 credits.

Introduction to mathematical optimization from a modeling and solution perspective. Formulation of applications as discrete and continuous optimization problems and equilibrium models. Survey and appropriate usage of basic algorithms, data and software tools, including modeling languages and subroutine libraries.

**Requisites:** (COMP SCI 200, 220, 300, 301, 302, 310, or placement into COMP SCI 300) and (MATH 320, 340, 341, or 375) or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/ISYE/MATH/STAT 525 – LINEAR OPTIMIZATION**

3 credits.

Introduces optimization problems whose constraints are expressed by linear inequalities. Develops geometric and algebraic insights into the structure of the problem, with an emphasis on formal proofs. Presents the theory behind the simplex method, the main algorithm used to solve linear optimization problems. Explores duality theory and theorems of the alternatives.

**Requisites:** MATH 320, 340, 341, 375, or 443 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**COMP SCI/I SY E 526 – ADVANCED LINEAR PROGRAMMING**

3 credits.

Review of linear programming. Polynomial time methods for linear programming. Quadratic programs and linear complementarity problems and related solution techniques. Solution sets and their continuity properties. Error bounds for linear inequalities and programs. Parallel algorithms for linear and quadratic programs.

**Requisites:** COMP SCI/I SY E/MATH/STAT/COMP SCI/I SY E/MATH 525 and (COMP SCI 200, 220, 300, 301, 302, 310, or placement into COMP SCI 300) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**COMP SCI/E C E/M E 532 – MATRIX METHODS IN MACHINE LEARNING**

3 credits.

Linear algebraic foundations of machine learning featuring real-world applications of matrix methods from classification and clustering to denoising and data analysis. Mathematical topics include: linear equations, regression, regularization, the singular value decomposition, and iterative algorithms. Machine learning topics include: the lasso, support vector machines, kernel methods, clustering, dictionary learning, neural networks, and deep learning. Previous exposure to numerical computing (e.g. Matlab, Python, Julia, R) required.

**Requisites:** (MATH 234, 320, 340, 341, or 375) and (E C E 203, COMP SCI 200, 220, 300, 301, 302, 310, 320, or placement into COMP SCI 300), graduate/professional standing, or declared in Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/E C E 533 – IMAGE PROCESSING**

3 credits.

Mathematical representation of continuous and digital images; models of image degradation; picture enhancement, restoration, segmentation, and coding; pattern recognition, tomography.

**Requisites:** E C E 330 and (MATH 320 or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 534 – COMPUTATIONAL PHOTOGRAPHY**

3 credits.

Study of sensing and computational techniques that enhance or extend the capabilities of digital photography by using methods from computer vision and computer graphics to create new visual representations. Algorithms for analyzing, improving, manipulating, combining, and synthesizing images.

**Requisites:** (COMP SCI 300 or 367) and (MATH 217, 221 or 275) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**COMP SCI 536 – INTRODUCTION TO PROGRAMMING LANGUAGES AND COMPILERS**

3 credits.

Introduction to the theory and practice of compiler design. Comparison of features of several programming languages and their implications for implementation techniques. Several programming projects required.

**Requisites:** COMP SCI/E C E/COMP SCI 354 and (COMP SCI 367 or 400) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 537 – INTRODUCTION TO OPERATING SYSTEMS**

4 credits.

Input-output hardware, interrupt handling, properties of magnetic tapes, discs and drums, associative memories and virtual address translation techniques. Batch processing, time sharing and real-time systems, scheduling resource allocation, modular software systems, performance measurement and system evaluation.

**Requisites:** COMP SCI/E C E/COMP SCI 354 and (COMP SCI 367 or 400) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### COMP SCI 538 – INTRODUCTION TO THE THEORY AND DESIGN OF PROGRAMMING LANGUAGES

3 credits.

Design and theory of programming languages: procedural, object-oriented, functional and logic paradigms. Serial and concurrent programming. Execution models and formal specification techniques.

**Requisites:** COMP SCI/E C E/COMP SCI 354 and (COMP SCI 367 or 400) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI/E C E/M E 539 – INTRODUCTION TO ARTIFICIAL NEURAL NETWORKS

3 credits.

Theory and applications of artificial neural networks: multi-layer perceptron, self-organization map, deep neural network, convolutional neural network, recurrent network, support vector machines, genetic algorithm, and evolution computing. Applications to control, pattern recognition, prediction, and object detection and tracking.

**Requisites:** COMP SCI 200, 220, 300, 301, 302, 310, placement into COMP SCI 300, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 540 – INTRODUCTION TO ARTIFICIAL INTELLIGENCE

3 credits.

Principles of knowledge-based search techniques, automatic deduction, knowledge representation using predicate logic, machine learning, probabilistic reasoning. Applications in tasks such as problem solving, data mining, game playing, natural language understanding, computer vision, speech recognition, and robotics.

**Requisites:** (COMP SCI 300, 320 or 367) and (MATH 211, 217, 221, or 275) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 542 – INTRODUCTION TO SOFTWARE SECURITY

3 credits.

Teaches the security considerations that occur during all steps of the software development life cycle: methodologies for designing secure software, programming using secure programming techniques, in-depth vulnerability assessment methodologies, static and dynamic analysis tools for evaluating software security, and system defenses reducing security threats.

**Requisites:** COMP SCI 400 or 320, graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### COMP SCI 544 – INTRODUCTION TO BIG DATA SYSTEMS

3 credits.

Deploy and use distributed systems to store and analyze large datasets. Unstructured and structured approaches to storage will be covered.

Analysis will involve learning new query languages, processing streaming data, and training machine learning models. Most programming will be done in Python.

**Requisites:** COMP SCI 320, 400, or Graduate/Professional Standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### COMP SCI 545 – NATURAL LANGUAGE AND COMPUTING

3 credits.

The course covers basic techniques and tools in natural language processing: generative grammars, parsing, dictionary construction, semantic networks, generation of text from a knowledge base, natural language interfacing, and machine translation.

**Requisites:** COMP SCI 536, 537, or 564 or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**COMP SCI/E C E 552 – INTRODUCTION TO COMPUTER ARCHITECTURE**

3 credits.

The design of computer systems and components. Processor design, instruction set design, and addressing; control structures and microprogramming; memory management, caches, and memory hierarchies; and interrupts and I/O structures. E C E 551 or knowledge of Verilog is recommended.

**Requisites:** (COMP SCI/E C E/COMP SCI 352 and COMP SCI/E C E/COMP SCI 354) or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/I SY E/M E 558 – INTRODUCTION TO COMPUTATIONAL GEOMETRY**

3 credits.

Introduction to fundamental geometric computations and algorithms, and their use for solving engineering and scientific problems. Computer representations of simple geometric objects and paradigms for algorithm design. Applications from areas of engineering analysis, design and manufacturing, biology, statistics, and other sciences.

**Requisites:** (COMP SCI 367 or 400) and MATH 234 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**COMP SCI 559 – COMPUTER GRAPHICS**

3 credits.

Survey of computer graphics. Image representation, formation, presentation, composition and manipulation. Modeling, transformation, and display of geometric objects in two and three dimensions. Representation of curves and surfaces. Rendering, animation, multi-media and visualization. Fluency with vector mathematics (e.g., from MATH 234 or a linear algebra class) is recommended.

**Requisites:** (MATH 222 or MATH 276) and (COMP SCI 367 or 400) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/E C E 561 – PROBABILITY AND INFORMATION THEORY IN MACHINE LEARNING**

3 credits.

Probabilistic tools for machine learning and analysis of real-world datasets. Introductory topics include classification, regression, probability theory, decision theory and quantifying information with entropy, relative entropy and mutual information. Additional topics include naive Bayes, probabilistic graphical models, discriminant analysis, logistic regression, expectation maximization, source coding and variational inference.

**Requisites:** (MATH 320, 340, 341, 375, or COMP SCI/E C E/M E/COMP SCI/E C E 532 or concurrent enrollment) and (E C E 331, MATH/STAT/MATH 309, 431, STAT 311, 324, STAT/M E/STAT 424 or MATH 531) or grad/profsnl standing or declared in Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 564 – DATABASE MANAGEMENT SYSTEMS: DESIGN AND IMPLEMENTATION**

4 credits.

What a database management system is; different data models currently used to structure the logical view of the database: relational, hierarchical, and network. Hands-on experience with relational and network-based database systems. Implementation techniques for database systems. File organization, query processing, concurrency control, rollback and recovery, integrity and consistency, and view implementation.

**Requisites:** COMP SCI/E C E/COMP SCI 354 and (COMP SCI 367 or 400) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 565 – INTRODUCTION TO DATA VISUALIZATION**

3 credits.

Introduction to topics such as perception, cognition, communication, design, implementation, applications, tools, and evaluation. Provides a broad survey of the field and covers fundamental concepts, theory, and tools in data visualization with opportunities for hands-on activities. Gain real-world experience in designing and evaluating visualizations.

**Requisites:** COMP SCI 320, 400, or Graduate/Professional Standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**COMP SCI 566 – INTRODUCTION TO COMPUTER VISION**

3 credits.

Topics include image formation, feature detection, motion estimation, image mosaics, 3D shape reconstruction, and object recognition. Applications of these techniques include building 3D maps, creating virtual characters, organizing photo and video databases, human computer interaction, video surveillance, and automatic vehicle navigation. Broad overview of various computer vision and machine learning techniques and sensing and imaging technologies used in computer vision applications. This is a project-based course.

**Requisites:** COMP SCI 400 and (MATH 320, 340, 341 or 375) and (STAT 302, 311, 324, 340, 371, MATH/STAT/MATH 309, 431, MATH 331 or 531) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**COMP SCI/B M I 567 – MEDICAL IMAGE ANALYSIS**

3 credits.

Present introductory medical image processing and analysis techniques. Topics include medical imaging formats, segmentation, registration, image quantification, classification. Strongly encourage Matlab experience, such as COMP SCI 310 or 368-Matlab.

**Requisites:** (MATH 320 or 340) and (B M I/STAT 511, 541, B M I/POP HLTH/B M I 551, STAT 324, 371, or FW ECOL/HORT/STAT/F&W ECOL/HORT 571) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 570 – INTRODUCTION TO HUMAN-COMPUTER INTERACTION**

4 credits.

User-centered software design; (1) principles of and methods for understanding user needs, designing and prototyping interface solutions, and evaluating their usability, (2) their applications in designing web-based, mobile, and embodied interfaces through month long group projects. Meets with COMP SCI 270.

**Requisites:** COMP SCI 200, 300, 301, 302, placement into COMP SCI 300, or COMP SCI/L I S/COMP SCI 102 (COMP SCI 202 prior to Fall 2023); grad/professional standing; declared in the Capstone Cert in Comp Sci for Professionals. Not open to students with credit for COMP SCI 270.

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 571 – BUILDING USER INTERFACES**

3 credits.

Introduces software development of user interfaces (UIs). Build competence in implementing UIs using state-of-the-art (1) UI paradigms, such as event-driven interfaces, direct-manipulation interfaces, and dialogue-based interaction; (2) methods for capturing, interpreting, and responding to different forms of user input and states, including pointing, text entry, speech, touch, gestures, user activity, context, and physiological states; and (3) platform-specific UI development APIs, frameworks, and toolkits for multiple platforms including web/mobile/desktop interfaces, natural user interfaces, and voice user interfaces. Learn about the fundamental concepts, technologies, algorithms, and methods in building user interfaces, implement UIs using of state-of-the-art UI development tools, and build a UI development portfolio.

**Requisites:** COMP SCI 400

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/B M I 576 – INTRODUCTION TO BIOINFORMATICS**

3 credits.

Algorithms for computational problems in molecular biology. Studies algorithms for problems such as: genome sequencing and mapping, pairwise and multiple sequence alignment, modeling sequence classes and features, phylogenetic tree construction, and gene-expression data analysis.

**Requisites:** (COMP SCI 320 or 400) and MATH 222, graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 577 – INTRODUCTION TO ALGORITHMS**

4 credits.

Basic paradigms for the design and analysis of efficient algorithms: greed, divide-and-conquer, dynamic programming, reductions, and the use of randomness. Computational intractability including typical NP-complete problems and ways to deal with them.

**Requisites:** (COMP SCI/MATH/COMP SCI 240 or COMP SCI/MATH/STAT/COMP SCI/MATH 475) and (COMP SCI 367 or 400), or graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 578 – CONTEST-LEVEL PROGRAMMING**

1 credit.

Training in computer programming for competitions: assessing the coding difficulty and complexity of computational problems, recognizing the applicability of known algorithms, fast coding and testing, team work. COMP SCI 577 is suggested but not required.

**Requisites:** (COMP SCI 300 or 367), graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**COMP SCI/DS 579 – VIRTUAL REALITY**

3 credits.

Introduces students to the field of virtual reality and focuses on creating immersive, interactive virtual experiences. Survey topics include historical perspectives on virtual reality technology, computer graphics and 3D modeling, human perception and psychology, human computer interaction and user interface design. This course is designed for students with backgrounds in Computer Science, Engineering, Art, Architecture and Design. Students will work in interdisciplinary teams on projects, culminating in a final event that will be showcased to the public. While not an official uisite, the class will be technologically motivated; therefore students should be comfortable learning new software. The class will utilize publicly available game design software which provides tools and services for the creation of interactive content. While not necessary, students may find it helpful to have taken classes in programming and computer graphics (such as COMP SCI 559: Computer Graphics) or in 3D modeling (such as ART 429: 3D Digital Studio I or DS 242: Visual Communication II).

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/L I S 611 – USER EXPERIENCE DESIGN 1**

3 credits.

Introduction to the user experience design including key stages of the design process, design ethics, and the methods and tools involved at each stage of design. Conduct formative research on clients, users, use contexts and tasks. Gain experience with user research methodologies and learn to create intermediate design tools such as personas. Develop and present a design proposal for a chosen project.

**Requisites:** Declared in Information MS, Design + Innovation MS, or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI/L I S 612 – USER EXPERIENCE DESIGN 2**

3 credits.

Advanced study of UX design. Introduces processes of ideation, key concepts of visual design, conceptual and interaction design, low and high-resolution prototyping of design techniques. Applications include drafting designs based on user models and initial testing of prototypes.

**Requisites:** L I S/COMP SCI/L I S 611 and Declared in Information MS, Design + Innovation MS, or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/L I S 613 – USER EXPERIENCE DESIGN 3**

3 credits.

Conduct formal evaluations of the user experience (UX) or usability of a digital system. Gain familiarity with the evaluation and research process including key stages, tasks for each stage, common data collection and analysis methods, and common tools employed in the field. Gain experience with a variety of UX evaluation approaches. Collect pilot data and develop a proposal for further UX testing.

**Requisites:** L I S/COMP SCI/L I S 612 and Declared in Information MS, Design + Innovation MS, or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI/L I S 614 – USER EXPERIENCE DESIGN CAPSTONE**

1 credit.

Applies a design studio critique approach to produce a learning environment of collaborative and interdisciplinary peer critique and learning, in addition to provide expert feedback and suggestions. Present and defend the latest iteration of the user experience design project developed in earlier courses while learning about the professions associated with digital user experience design.

**Requisites:** L I S/COMP SCI/L I S 613 and declared in Design + Innovation MS, or the Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### COMP SCI/ISYE 635 – TOOLS AND ENVIRONMENTS FOR OPTIMIZATION

3 credits.

Formulation and modeling of applications from computer sciences, operations research, business, science and engineering involving optimization and equilibrium models. Survey and appropriate usage of software tools for solving such problems, including modeling language use, automatic differentiation, subroutine libraries and web-based optimization tools and environments.

**Requisites:** (MATH 320, 340, 341, or 375) and (COMP SCI 200, 300, 301, 302, placement into COMP SCI 300, or COMP SCI/LIS/COMP SCI 102 (COMP SCI 202 prior to Fall 2023)); grad/professional standing; declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### COMP SCI 638 – UNDERGRADUATE TOPICS IN COMPUTING

1-4 credits.

Selected topics in computing. Each offering of the course will cover a topic selected by the instructor and may cover one or more topics from all of computer science.

**Requisites:** COMP SCI 200, 300, 301, 302, 310, 367, placement into COMP SCI 300, or COMP SCI/LIS/COMP SCI 102 (COMP SCI 202 prior to Fall 2023), graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### COMP SCI 639 – UNDERGRADUATE ELECTIVE TOPICS IN COMPUTING

3-4 credits.

Selected topics in computing. Each offering of the course will cover a topic selected by the instructor. Offerings of this course will provide sufficient depth into their subject to count as electives to meet CS Major requirements.

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### COMP SCI 640 – INTRODUCTION TO COMPUTER NETWORKS

3 credits.

Architecture of computer networks and network protocols, protocol layering, reliable transmission, congestion control, flow control, naming and addressing, unicast and multicast routing, network security, network performance widely used protocols such as Ethernet, wireless LANs, IP, TCP, and HTTP.

**Requisites:** COMP SCI 537 or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 642 – INTRODUCTION TO INFORMATION SECURITY

3 credits.

Senior level undergraduate course covering various topics on information security. Covers a wide range of topics, such as cryptographic primitives, security protocols, system security, and emerging topics. Elementary knowledge of mathematical logic and discrete probability theory needed, such as MATH/COMP SCI 240.

**Requisites:** COMP SCI 537 or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### COMP SCI 681 – SENIOR HONORS THESIS

3 credits.

Individual study for seniors completing theses for honors in the Computer Sciences major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### COMP SCI 682 – SENIOR HONORS THESIS

3 credits.

Individual study for seniors completing theses for honors in the Computer Sciences major as arranged with a faculty member. Continuation of COMP SCI 681

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP SCI 691 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**COMP SCI 692 – SENIOR THESIS**

2-3 credits.

Individual study for seniors completing theses as arranged with a faculty member, continuation of COMP SCI 691

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP SCI 698 – DIRECTED STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**COMP SCI 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COMP SCI 701 – CONSTRUCTION OF COMPILERS**

3 credits.

Principles of the design and implementation of programming languages. Topics include: Principles of compilation, static program analysis, compilation methods to support profiling, and code-generation methods. Knowledge of programming languages and compiler design strongly encouraged, such as COMP SCI 536.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**COMP SCI 702 – GRADUATE COOPERATIVE EDUCATION**

1-2 credits.

A full-time cooperative experience (10 or 5 week option) in computer science in a commercial, government, or nonprofit setting, usually in the form of an internship. The work will be monitored by a graduate advisor from the faculty of the Department of Computer Sciences. 10 week option for 2 credits, 5 week option for 1 credit.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**COMP SCI 703 – PROGRAM VERIFICATION AND SYNTHESIS**

3 credits.

Formal methods for program verification. Model-checking techniques; linear temporal logic; computational tree logic; logic/automata connection; bisimulations; probabilistic model-checking. Special topics include: program synthesis, verification and synthesis of privacy properties. Knowledge of programming languages and compiler design strongly encouraged, such as COMP SCI 536.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 704 – PRINCIPLES OF PROGRAMMING LANGUAGES**

3 credits.

Introduction to principles of advanced programming languages and programming-language theory. Topics include: lambda-calculus, functional languages, polymorphic functions, type inference, structural induction, lazy evaluation, operational semantics, denotational semantics, and axiomatic semantics. Students are strongly encouraged to have knowledge of programming languages, such as from COMP SCI 536.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**COMP SCI 706 – ANALYSIS OF SOFTWARE ARTIFACTS**

3 credits.

Advanced course covering various analysis techniques used in software engineering. Covers techniques for analyzing various software artifacts. Some of the topics that will be covered are: model checking, testing, program analysis, requirements analysis, and safety analysis. Students are strongly encouraged to have knowledge of programming languages and compiler design, such as COMP SCI 536, and a basic knowledge of mathematical logic.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017



**COMP SCI/E C E 707 – MOBILE AND WIRELESS NETWORKING**

3 credits.

Design and implementation of protocols, systems, and applications for mobile and wireless networking, particularly at the media access control, network, transport, and application layers. Focus is on the unique problems and challenges presented by the properties of wireless transmission, various device constraints such as limited battery power, and node mobility. Knower of computer networking is strongly encouraged, such as from COMP SCI 640 or E C E 537.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI 710 – COMPUTATIONAL COMPLEXITY**

3 credits.

Study of the capabilities and limitations of efficient computation. Relationships between models representing capabilities such as parallelism, randomness, quantum effects, and non-uniformity; and models based on the notions of nondeterminism, alternation, and counting, which capture the complexity of important problems. Knowledge of the theory of computation is strongly encouraged, such as COMP SCI 520.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**COMP SCI/MATH 714 – METHODS OF COMPUTATIONAL MATHEMATICS I**

3 credits.

Development of finite difference methods for hyperbolic, parabolic and elliptic partial differential equations. Analysis of accuracy and stability of difference schemes. Direct and iterative methods for solving linear systems. Introduction to finite volume methods. Applications from science and engineering. Students are strongly encouraged to have programming skills (e.g. COMP SCI 200) and some undergraduate numerical analysis (e.g. MATH/COMP SCI 514 or COMP SCI 412), analysis and differential equations (e.g. MATH 322 and MATH 521) and linear algebra (e.g. MATH 341).

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI/MATH 715 – METHODS OF COMPUTATIONAL MATHEMATICS II**

3 credits.

Introduction to spectral methods (Fourier, Chebyshev, Fast Fourier Transform), finite element methods (Galerkin methods, energy estimates and error analysis), and mesh-free methods (Monte-Carlo, smoothed-particle hydrodynamics) for solving partial differential equations. Applications from science and engineering. Applications from science and engineering. Students are strongly encouraged to have programming skills (e.g. COMP SCI 200), undergraduate numerical analysis (e.g. MATH/COMP SCI 514 or COMP SCI 412), analysis (MATH 322 and math 521) and linear algebra (e.g. MATH 341 or equiv.)

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI/I SY E 719 – STOCHASTIC PROGRAMMING**

3 credits.

Stochastic programming is concerned with decision making in the presence of uncertainty, where the eventual outcome depends on a future random event. Topics include modeling uncertainty in optimization problems, risk measures, stochastic programming algorithms, approximation and sampling methods, and applications. Students are strongly encouraged to have knowledge of linear programming (e.g., MATH/COMP SCI/I SY E/STAT 525) and probability and statistics (e.g., MATH/STAT 431). Knowledge of integer optimization (MATH/COMP SCI/I SY E 728) is helpful, but not required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**COMP SCI/I SY E 723 – DYNAMIC PROGRAMMING AND ASSOCIATED TOPICS**

3 credits.

General and special techniques of dynamic programming developed by means of examples. Shortest-path algorithms. Deterministic equipment replacement models. Resource allocation problem. Traveling-salesman problem. Knapsack problem. Analysis of inventory systems. General stochastic formulations. Markovian decision processes. Students are strongly encouraged to have knowledge of mathematical optimization (e.g., COMP SCI/I SY E/MATH/STAT 525, I SY E 623, COMP SCI/I SY E/MATH/STAT 726), knowledge of analysis (e.g., MATH/STAT 431 or 521) and programming ability (e.g., COMP SCI 200 or 301)

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**COMP SCI/I SY E/MATH/STAT 726 – NONLINEAR OPTIMIZATION I**  
3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasi-Newton methods; conjugate-gradient and limited-memory methods for large-scale problems; derivative-free optimization; algorithms for least-squares problems and nonlinear equations; gradient projection algorithms for bound-constrained problems; and simple penalty methods for nonlinearly constrained optimization. Students are strongly encouraged to have knowledge of linear algebra and familiarity with basic mathematical analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/I SY E 727 – CONVEX ANALYSIS**  
3 credits.

Convex sets in finite-dimensional spaces: relative interiors, separation, set operations. Convex functions: conjugacy, subdifferentials and directional derivations, functional operations, Fenchel-Rockafellar duality. Applications to operations research and related areas. Students taking this course are strongly encouraged to have had a course in basic analysis (e.g. MATH 521) and a course in linear algebra (e.g., MATH 340).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**COMP SCI/I SY E/MATH 728 – INTEGER OPTIMIZATION**  
3 credits.

Introduces optimization problems over integers, and surveys the theory behind the algorithms used in state-of-the-art methods for solving such problems. Special attention is given to the polyhedral formulations of these problems, and to their algebraic and geometric properties. Applicability of Integer Optimization is highlighted with applications in combinatorial optimization. Key topics include: formulations, relaxations, polyhedral theory, cutting planes, decomposition, enumeration. Students are strongly encouraged to have knowledge of Linear Programming (e.g., MATH/COMP SCI/I SY E/STAT 525), including algorithms, duality and polyhedral theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/I SY E/MATH 730 – NONLINEAR OPTIMIZATION II**  
3 credits.

Theory and algorithms for nonlinearly constrained optimization. Relevant geometric concepts, including tangent and normal cones, theorems of the alternative, and separation results. Constraint qualifications. Geometric and algebraic expression of first-order optimality conditions. Second-order optimality conditions. Duality. Nonlinear programming algorithms: merit functions and filters; interior-point, augmented Lagrangian, and sequential quadratic programming algorithms.

**Requisites:** COMP SCI/I SY E/MATH/STAT/COMP SCI/I SY E/MATH 726

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 736 – ADVANCED OPERATING SYSTEMS**  
3 credits.

Advanced topics in operating systems, including process communication, resource allocation, multiprocess and network operating systems, kernel philosophies, fault-tolerant systems, virtual machines, high-level language systems, verifiability and proof techniques. COMP SCI 537 or cons inst

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 739 – DISTRIBUTED SYSTEMS**  
3 credits.

Basic concepts; distributed programming; distributed file systems; atomic actions; fault tolerance, transactions, program and data replication, recovery; distributed machine architectures; security and authentication; load balancing and process migration; distributed debugging; distributed performance measurement; distributed simulation techniques; distributed applications; correctness considerations and proof systems.

**Requisites:** COMP SCI 736

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 740 – ADVANCED COMPUTER NETWORKS**  
3 credits.

Advanced topics in computer communications networks: congestion and flow control; routing; rate-based protocols; high speed interfaces and technologies: metropolitan area networks; fast packet switching technologies; advanced applications; network services: name service, authentication, resource location. Students are strongly encouraged to have knowledge of computer network design and protocols (e.g., COMP SCI 640)

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 744 – BIG DATA SYSTEMS**

3 credits.

Issues in the design and implementation of big data processing systems, including: an overview of cluster architecture, key design goals (flexibility, performance and fault tolerance), popular execution frameworks, basic abstractions, and applications (e.g., batch analytics, stream processing, graph processing, and machine learning).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI/E C E 750 – REAL-TIME COMPUTING SYSTEMS**

3 credits.

Introduction to the unique issues in the design and analysis of computer systems for real-time applications. Hardware and software support for guaranteeing timeliness with and without failures. Resource management, time-constrained communication, scheduling and imprecise computations, real-time kernels and case studies. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552) and operating system functions (e.g., COMP SCI 537)

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**COMP SCI/E C E 752 – ADVANCED COMPUTER ARCHITECTURE I**

3 credits.

Processor design, computer arithmetic, pipelining, multi-operation processors, vector processors, control units, precise interrupts, main memory, cache memories, instruction set design, stack machines, busses and I/O, protection and security. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI/E C E 755 – VLSI SYSTEMS DESIGN**

3 credits.

Overview of MOS devices and circuits; introduction to integrated circuit fabrication; topological design of data flow and control; interactive graphics layout; circuit simulation; system timing; organizational and architectural considerations; alternative implementation approaches; design project. E C E 555 or equivalent experience is strongly recommended.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI/E C E 756 – COMPUTER-AIDED DESIGN FOR VLSI**

3 credits.

Broad introduction to computer-aided design tools for VLSI, emphasizing implementation algorithms and data structures. Topics covered: design styles, layout editors, symbolic compaction, module generators, placement and routing, automatic synthesis, design-rule checking, circuit extraction, simulation and verification. Students are strongly encouraged to have programming skills and to have taken a course in Digital System Fundamentals such as E C E/COMP SCI 352.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**COMP SCI/E C E 757 – ADVANCED COMPUTER ARCHITECTURE II**

3 credits.

Parallel algorithms, principles of parallelism detection and vectorizing compilers, interconnection networks, MIMD machines, processor synchronization, data coherence, multis, dataflow machines, special purpose processors. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI 758 – ADVANCED TOPICS IN COMPUTER ARCHITECTURE**

3 credits.

Advanced topics in computer architecture that explore the implications to architecture of forthcoming evolutionary and revolutionary changes in application demands, software paradigms, and hardware implementation technologies. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**COMP SCI/E C E/E M A/E P/M E 759 – HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of hardware and software solutions that enable the use of advanced computing in tackling computationally intensive Engineering problems. Hands-on learning promoted through programming assignments that leverage emerging hardware architectures and use parallel computing programming languages. Students are strongly encouraged to have completed COMP SCI 367 or COMP SCI 400 or to have equivalent experience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**COMP SCI/E C E 760 – MACHINE LEARNING**

3 credits.

Computational approaches to learning: including inductive inference, explanation-based learning, analogical learning, connectionism, and formal models. What it means to learn. Algorithms for learning. Comparison and evaluation of learning algorithms. Cognitive modeling and relevant psychological results.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/E C E 761 – MATHEMATICAL FOUNDATIONS OF MACHINE LEARNING**

3 credits.

Mathematical foundations of machine learning theory and algorithms. Probabilistic, algebraic, and geometric models and representations of data, mathematical analysis of state-of-the-art learning algorithms and optimization methods, and applications of machine learning. Students should have taken a course in statistics and a course in linear algebra (e.g., STAT 302 and MATH 341).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI 762 – ADVANCED DEEP LEARNING**

3 credits.

Explore methods and applications of deep learning. Covers cutting-edge topics, including neural architecture design, robustness and reliability of deep learning, learning with less supervision, lifelong machine learning, deep generative modeling, theoretical understanding of deep learning, and interpretable deep learning.

**Requisites:** COMP SCI/E C E/COMP SCI 760

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 763 – SECURITY AND PRIVACY FOR DATA SCIENCE**

3 credits.

Security and privacy concerns in data science. Three core subjects will be considered: Differential privacy and algorithmic fairness; Adversarial machine learning; and Applied cryptography, especially with applications to machine learning. In addition, a selection of more advanced topics will be covered. Possible examples include additional notions of privacy, language-based security, robust optimization. A firm grasp of probability/statistics (STAT/MATH 431) is recommended. Previous exposure to at least one of cryptography (COMP SCI/E C E/MATH 435), security (COMP SCI 642), and modern machine learning (COMP SCI/E C E/M E 539 or 540) is also recommended.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**COMP SCI 764 – TOPICS IN DATABASE MANAGEMENT SYSTEMS**

3 credits.

Implementation of database management systems, the impact of new technology on database management systems, back-end database computers, distributed database management systems, concurrency control, and query execution in both distributed and centralized systems, implementation of multiple user views, roll-back and recovery mechanisms, database translation. Students are strongly encouraged to have knowledge of database design (e.g., COMP SCI 564).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 765 – DATA VISUALIZATION**

3 credits.

Principles of the visual presentation of data. Survey of Information Visualization, Scientific Visualization, and Visual Analytics. Design and evaluation of visualizations and interactive exploration tools. Introduction to relevant foundations in visual design, human perception, and data analysis. Encodings, layout and interaction. Approaches to large data sets. Visualization of complex data types such as scalar fields, graphs, sets, texts, and multi-variate data. Use of 2D, 3D and motion in data presentations. Implementation issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COMP SCI 766 – COMPUTER VISION**

3 credits.

Fundamentals of image analysis and computer vision; image acquisition and geometry; image enhancement; recovery of physical scene characteristics; shape-from techniques; segmentation and perceptual organization; representation and description of two-dimensional objects; shape analysis; texture analysis; goal-directed and model-based systems; parallel algorithms and special-purpose architectures. Students are strongly encouraged to have basic proficiency in calculus and linear algebra, such as MATH 340, and basic programming such as COMP SCI 300 or COMP SCI 367.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COMP SCI/B M I 767 – COMPUTATIONAL METHODS FOR MEDICAL IMAGE ANALYSIS**

3 credits.

Study of computational techniques that facilitate automated analysis, manipulation, denoising, and improvement of large-scale and high resolution medical images. Design and implementation of methods from computer Vision and Machine Learning to efficiently process such image data to answer biologically and clinically meaningful scientific questions. Students are strongly encouraged to have programming skills and basic proficiency in calculus and linear algebra, such as MATH 340.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**COMP SCI 769 – ADVANCED NATURAL LANGUAGE PROCESSING**

3 credits.

Develop algorithms and mathematical models for natural language processing tasks, including text categorization, information retrieval, speech recognition, machine translation, and information extraction. Focus is on the state-of-the-art computational techniques as they are applied to natural language tasks. Students are strongly encouraged to have knowledge of introductory artificial intelligence (e.g., COMP SCI 540).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI/ED PSYCH/PSYCH 770 – HUMAN-COMPUTER INTERACTION**

3 credits.

Principles of human-computer interaction (HCI); human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCI, including applications in ubiquitous, affective, assistive, social, and embodied computing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI/B M I 771 – LEARNING BASED METHODS FOR COMPUTER VISION**

3 credits.

Addresses the problems of representation and reasoning for large amounts of visual data, including images and videos, medical imaging data, and their associated tags or text descriptions. Introduces deep learning in the context of computer vision. Covers topics on visual recognition using deep models, such as image classification, object detection, human pose estimation, action recognition, 3D understanding, and medical image analysis. Emphasizes the design of vision and learning algorithms and models, as well as their practical implementations. Strongly recommended to have knowledge in computer vision or machine learning [such as COMP SCI 540] or medical image analysis [such as B M I / COMP SCI/ B M I 567].

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI/B M I 775 – COMPUTATIONAL NETWORK BIOLOGY**

3 credits.

Introduces networks as a powerful representation in many real-world domains including biology and biomedicine. Encompasses theory and applications of networks, also referred to as graphs, to study complex systems such as living organisms. Surveys the current literature on computational, graph-theoretic approaches that use network algorithms for biological modeling, analysis, interpretation, and discovery. Enables hands-on experience in network biology by implementing computational projects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI/B M I 776 – ADVANCED BIOINFORMATICS**

3 credits.

Advanced course covering computational problems in molecular biology. The course will study algorithms for problems such as: modeling sequence classes and features, phylogenetic tree construction, gene-expression data analysis, protein and RNA structure prediction, and whole-genome analysis and comparisons.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022



**COMP SCI/E C E 782 – ADVANCED COMPUTER SECURITY AND PRIVACY**

3 credits.

Security and privacy issues in software, networks, and hardware systems. Security vulnerabilities, privacy threats, threats modeling, and mitigation strategies. Privacy issues related to user interaction with devices, online systems, and networks. In addition, a selection of more advanced topics will be covered. Possible examples include applied cryptography in the context of systems, security and privacy policies, user authentication, and cyber-physical systems. Builds on prior experiences with one or more of the following: networking, security, modern machine learning, embedded systems, and mobile computing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI 784 – FOUNDATIONS OF DATA MANAGEMENT**

3 credits.

Foundational concepts in databases and data management. The first part of the course discusses topics on query languages (conjunctive queries, Datalog), their expressivity and complexity of evaluation. The second part studies advanced topics in modern data management, including data streams, massive parallelism, provenance, uncertain data management and privacy. There are no specific course prerequisites. It is strongly encouraged that the students are familiar with databases and relational algebra (COMP SCI 564 or equivalent). Knowledge of algorithms, complexity theory and probability will also be helpful.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI 787 – ADVANCED ALGORITHMS**

3 credits.

Advanced paradigms for the design and analysis of efficient algorithms, including the use of randomness, linear programming, and semi-definite programming. Applications to data structures, approximating NP-hard optimization problems, learning, on-line and distributed problems. Students are strongly encouraged to have introductory knowledge of algorithms (e.g., COMP SCI 577)

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COMP SCI 790 – MASTER'S THESIS**

1-9 credits.

Grad st; Master's candidates only

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 799 – MASTER'S RESEARCH**

1-9 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 809 – MATHEMATICAL TECHNIQUES IN THE ANALYSIS OF ALGORITHMS**

3 credits.

Techniques for quantitative analysis of algorithms. Charging arguments, amortization, probabilistic methods. Adversary and information lower bounds. Use of methods from combinatorics, complex analysis, and asymptotics in obtaining precise analyses of quicksort, chained hashing, and other algorithms. Students are strongly encouraged to have knowledge of algorithms (e.g., COMP SCI 577) or applied math analysis (e.g., MATH 321) and theory of probability (e.g., MATH/STAT 431).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2018**COMP SCI 812 – ARITHMETIC ALGORITHMS**

3 credits.

Survey of algorithms and design paradigms for exact arithmetic, as used in public-key cryptography, computer algebra, and pseudo-random number generation. Topics include primality testing, factorization of integers and polynomials, discrete logarithms, and (optionally) elliptic curves and integer lattices. Students are strongly encourage to have knowledge of basic abstract algebra (e.g., MATH 541), and intermediate programming ability (e.g., COMP SCI 367 or COMP SCI 300).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**COMP SCI 838 – TOPICS IN COMPUTING**

1-3 credits.

Advanced topics of special interest to students in various areas of Computer Science. Each offering of the course will cover a topic selected by the instructor. Credit varies by offering - check with the department to determine how an offering counts toward degree requirements.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022



**COMP SCI 839 – CORE TOPICS IN COMPUTING**

3 credits.

Topics selected from advanced areas.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI/B M I/PSYCH 841 – COMPUTATIONAL COGNITIVE SCIENCE**

3 credits.

Studies the biological and computational basis of intelligence, by combining methods from cognitive science, artificial intelligence, machine learning, computational biology, and cognitive neuroscience. Requires ability to program.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**COMP SCI/E C E/STAT 861 – THEORETICAL FOUNDATIONS OF MACHINE LEARNING**

3 credits.

Advanced mathematical theory and methods of machine learning. Statistical learning theory, Vapnik-Chevronenkis Theory, model selection, high-dimensional models, nonparametric methods, probabilistic analysis, optimization, learning paradigms.

**Requisites:** COMP SCI/E C E/COMP SCI 761 or E C E 830**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COMP SCI 880 – TOPICS IN THEORETICAL COMPUTER SCIENCE**

3 credits.

Advanced topics in algorithms, complexity, and cryptography. The exact topic varies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 899 – PRE-DISSERTATOR RESEARCH**

1-9 credits.

Independent research supervised by a faculty member for students who have completed a master's degree but have not reached dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 900 – ADVANCED SEMINAR IN COMPUTER SCIENCE**

0-1 credits.

Seminar on recent research on various aspects of computer science.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI/B M E/B M I/BIOCHEM/CBE/GENETICS 915 – COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**

1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 990 – DISSERTATION**

1-6 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COMP SCI 999 – DISSERTATOR RESEARCH**

1-6 credits.

Advanced level mentored reading and research for dissertators.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CONSUMER SCIENCE (CNSR SCI)****CNSR SCI 111 – FINANCIAL LIFE SKILLS FOR UNDERGRADUATES**

1 credit.

Applied personal finance course to provide undergraduates in their first two years of college (freshman and sophomores) the knowledge and tools needed to successfully manage personal finances during their college years. Topics include financial values and behaviors, credit and student loans, housing, transportation, financial services, and spending and saving plans.

**Requisites:** Freshman or sophomore standing only**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CNSR SCI/RELIG ST 173 – CONSUMING HAPPINESS**

3 credits.

As the saying goes, money can't buy happiness -- but in modern America, we certainly try. This course will provide an overview of the study of happiness and well-being, examine how consumers engage in consumption in pursuit of happiness, as well as explore the emergence of the experience economy, and the intersection of money and well-being. Students will read academic and popular pieces on positive psychology, prosocial spending and explore the psychology of persuasion in the promises associated with this industry. In addition to integrating visual media, students will have the opportunity to experience first-hand whether the advice works in their own lives.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 201 – CONSUMER INSIGHTS**

3 credits.

Provides basic training in quantitative data analysis, with an emphasis on descriptive and inferential statistics with consumer research applications.

**Requisites:** (STAT 301, 371, SOC/CE SOC 360, PSYCH 210, ECON 310, GEN BUS 303, 306, or GEOG 360) and (GEN BUS 106 or A A E 335)**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 250 – RETAIL LEADERSHIP SYMPOSIUM**

1 credit.

Provides detailed examination of careers in the retailing industry. High level industry experts from leading companies in the retailing industry participate as guest speakers and panel members.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CNSR SCI 251 – FINANCIAL SERVICES LEADERSHIP SYMPOSIUM**

1 credit.

Provides detailed examination of careers in the financial services industry. High level industry experts from leading companies in the financial services industry participate as guest speakers and panel members.

**Requisites:** None**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023**CNSR SCI 255 – CONSUMER FINANCIAL SERVICES INNOVATION**

3 credits.

This course allows students to experience the current financial services market from the perspective of real families and then to design, develop and evaluate innovative solutions to improve service or address unmet needs.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 257 – INTRODUCTION TO RETAIL**

2 credits.

Foundational knowledge of the retail industry including the retail process, the evolution of the industry, key drivers and trends to provide a framework and set of concepts that will support the remainder of the core retail courses.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 273 – FINANCES & FAMILIES**

3 credits.

For the majority of Americans, money and family life is intertwined. This course will educate future financial planners on the basics of relationship formation and dissolution, gender and family dynamics and the psychology of money with the goal of encouraging financial equality among members of families of all types.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CNSR SCI 275 – CONSUMER FINANCE**

3 credits.

An introduction to concepts and methods used in personal and family financial planning. Methods for planning and allocating resources to attain specific financial objectives are discussed. Topics include investments in real and financial assets, consumer credit issues, and insurance, pension, tax, and estate planning.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**CNSR SCI 301 – CONSUMER ANALYTICS**

3 credits.

Leverage data analysis to drive consumer business decisions via the telling of a compelling, evidence-based story. Structured to 1) provide you with a core process by which data analysis can produce effective business actions, 2) build your analytical abilities to execute the process and 3) establish a method by which analytical results can be transformed into effective stories. The process and methods studied will have application across a broad range of careers.

**Requisites:** CNSR SCI 201**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CNSR SCI 321 – FINANCIAL LIFE SKILLS FOR LIFE AFTER GRADUATION**

1 credit.

This is an applied personal finance course that provides students nearing graduation (juniors and seniors) the knowledge and tools needed to successfully manage personal finances after college. Topics include financial values and behaviors, credit and student loans, housing, transportation, financial services, retirement planning, investing, and spending and saving plans.

**Requisites:** Junior standing. Not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 340 – BUILDING FINANCIAL ASSETS AND CAPABILITY FOR VULNERABLE FAMILIES**

3 credits.

This course prepares students to help assess and prevent household financial problems and improve financial security. Based on the context of vulnerable households, financial services and public policy, this course focuses on skills related to managing cash flow, credit and debt, saving for emergencies and long-term goals.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CNSR SCI 355 – FINANCIAL COACHING**

3 credits.

Financial coaching is an approach influenced by the fields of positive psychology and behavioral economics to help individuals build financial capability. This experiential course will prepare students for financial, social work, and asset building services.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 360 – SUSTAINABLE AND SOCIALLY JUST CONSUMPTION**

3 credits.

Examines how consumers influence sustainability and social justice through their purchases and how policy and globalization influence their choices. Students conduct original consumer research, and present their findings in an oral presentation and a research paper.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CNSR SCI 390 – FINANCIAL LIFE SKILLS: PEER EDUCATION TECHNIQUES**

2 credits.

Examine student learning and development to become effective peer educators in the BadgerSense Financial Life Skills program. Learn about common financial issues college students face. Develop knowledge and skills related to interpersonal and group communication, the impact of leadership, group learning and how to create a positive financial learning experience.

**Requisites:** Completion of CNSR SCI 275 OR CNSR SCI 111 OR CNSR SCI 321

**Repeatable for Credit:** No

**CNSR SCI/HDFS 465 – FAMILIES & POVERTY**

3 credits.

This course introduces students to research at the intersection of family and poverty studies. We will learn how family behaviors vary by socioeconomic status; how romantic relationships, childbearing, and childrearing may be implicated in poverty; what the consequences of poverty are for family functioning and children; and about the role of policy in influencing families and poverty.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CNSR SCI 475 – FAMILY ECONOMICS**

3 credits.

Analysis of the family as a unique economic unit in the changing American economy.

**Requisites:** ECON 101 or 111

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CNSR SCI 477 – THE CONSUMER AND THE MARKET**

3 credits.

Analysis of the consumer's market, consumer's behavior, and government policies affecting the consumer in the American economy.

**Requisites:** ECON 101 or 111

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 501 – SPECIAL TOPICS**

1-3 credits.

Specialized subject matter of current interest to undergraduate students. Prerequisites vary by topic.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CNSR SCI 527 – CONSUMER SPENDING AND SAVING OVER THE LIFECYCLE**

3 credits.

Analysis of consumer patterns of spending and saving from a lifecycle perspective. Introduces consumption theory and economic, social and psychological factors affecting consumption patterns.

**Requisites:** Must have Junior standing and completion of Consumer Science 275

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**CNSR SCI 555 – CONSUMER DESIGN STRATEGIES & EVALUATION**

3 credits.

Leveraging a combination of design thinking and strategic planning, students will design a clear plan of action with compelling evidence for expected outcomes, implement the proposed plan with contingencies for the inevitable challenges and adjustments, and evaluate impact relative to goals with objective recommendations for future action.

**Requisites:** Junior standing and CNSR SCI 657

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 560 – RETAIL PROMOTION**

3 credits.

Developing store image through visual merchandising, advertising, sales, and other promotional activities.

**Requisites:** CNSR SCI 257

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CNSR SCI 561 – CONSUMER ENGAGEMENT STRATEGIES**

3 credits.

Exploring applications of consumer behavior and insights in developing strategies for consumer engagement.

**Requisites:** CNSR SCI 657

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 562 – THE GLOBAL CONSUMER**

3 credits.

Key issues in international retailing with consideration of the global consumer.

**Requisites:** CNSR SCI 257

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 564 – RETAIL FINANCIAL ANALYSIS**

3 credits.

Provides tools for planning and analyzing retail financial performance. Includes elements of retail financial statements, pricing, purchasing terms and conditions, merchandise planning, inventory control, and economic factors that impact retail businesses.

**Requisites:** CNSR SCI 257, (ACCT I S 100 or 300 or GEN BUS 310), and (GEN BUS 106 or AAE 335), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 567 – PRODUCT DEVELOPMENT STRATEGIES IN RETAILING**

3 credits.

Merchandise product development planning through market trend analysis, assortment planning sourcing production.

**Requisites:** CNSR SCI 257

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 575 – FAMILY ECONOMICS AND PUBLIC POLICY**

3 credits.

Analysis of objectives of public policies specifically concerned with the economic welfare of families as expressed or proposed in federal and state legislation; appraisal of their economic and social consequences; and analysis of the issue.

**Requisites:** ECON 101 or 111

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**CNSR SCI 579 – CONSUMER POLICY ANALYSIS**

3 credits.

Analysis of consumer policies enacted and proposed at federal, state, and municipal levels; application of economic analysis to consumer laws, public policies and regulations; study of the process of creating and enforcing legislation and impacts on consumers' well-being.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CNSR SCI 601 – CONSUMER SCIENCE INTERNSHIP**

1-8 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in consumer science related fields. Course intended for juniors and seniors in Consumer Science.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CNSR SCI 603 – RETAILING INTERNSHIP**

1-6 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in retailing related fields. Course intended for juniors and seniors in Retailing and Consumer Behavior.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CNSR SCI 627 – ADVANCED CONSUMER FINANCE**

3 credits.

Studies financial markets and instruments from the perspective of individual consumers and their portfolio decisions over their lifetime.

**Requisites:** CNSR SCI 275**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CNSR SCI 635 – ESTATE PLANNING FOR FINANCIAL PLANNERS**

3 credits.

Analysis from a financial planner's perspective of the process of planning the accumulation, conservation, and distribution of an estate, in the manner that most effectively and efficiently accomplishes an individual's personal tax and non-tax objectives.

**Requisites:** CNSR SCI 275 or ECON/FINANCE/ECON 300**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 657 – CONSUMER BEHAVIOR**

3 credits.

Analyses from social and psychological perspectives. Motivation, perception, learning and attitude formation. Effects of social class, family structure, cultural backgrounds and reference groups.

**Requisites:** Sophomore standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 665 – HOUSEHOLD RISK MANAGEMENT**

3 credits.

Application of advanced analytical techniques to examine household financial risk. Implications for financial planning of changes in family structure and earnings. Private and social insurance that guard against economic consequences of death, disability, ill health, retirement, marital dissolution. Use of financial planning software.

**Requisites:** (ECON 101 or 111) and CNSR SCI 275**Repeatable for Credit:** No**Last Taught:** Fall 2022**CNSR SCI 675 – FAMILY FINANCIAL COUNSELING**

3 credits.

Systems approach to family financial management, stressing development of interpersonal techniques by professionals who will assist individuals and families to become responsible financial managers.

**Requisites:** CNSR SCI 275 and 627**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 680 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for seniors completing theses for Human Ecology honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2011**CNSR SCI 690 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**CNSR SCI 699 – INDEPENDENT STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced**L&S Credit - Counts as Liberal Arts and Science credit in L&S****Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CNSR SCI 888 – ADVANCED CONSUMER BEHAVIOR**

3 credits.

The purpose of this class is to provide graduate students with a broad-based knowledge of the consumer behavior literature. The objective of the course is to develop students as active researchers in fields that require an understanding of consumer research. A prior undergraduate or graduate course in consumer behavior is recommended.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CNSR SCI 901 – GRADUATE SPECIAL TOPICS IN CONSUMER SCIENCE**

1-3 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**CNSR SCI 930 – SEMINAR IN FAMILY ECONOMIC POLICY**

3 credits.

Graduate seminar on family economic well-being and the social and consumer policies that influence economic behavior and family economic status. Topics vary each year.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CNSR SCI 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CNSR SCI 999 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## COUNSELING PSYCHOLOGY (COUN PSY)

**COUN PSY 105 – HUMAN RESOURCES DEVELOP: AWARENESS PROCESSES-CNSL&GUID PERSPECTIVE**

1 credit.

Didactic and experiential learning and exploration to provide basic understanding of inter- and intrapersonal relations. Topics include values clarification, information acquisition, skill acquisition, human relations, self-understanding, self-development, and self-evaluation.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 110 – HUMAN RESOURCES DEVELOPMENT: CAREER STRATEGIES**

1 credit.

Exploration and vocational development through didactic and experiential learning. Career education concerns the place and value of work in the individual's life span and style--development and assessment of self, an understanding of the world of work, and facilitation of decision-making, planning, and preparation.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 115 – HUMAN RESOURCES DEVELOPMENT: EDUCATIONAL EFFECTIVENESS**

1 credit.

Exploration of personal, institutional, and community resources that optimize academic success and persistence. Utilizes didactic and experiential methods to develop higher level learning, skill, and understanding.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY/ASIAN/ED PSYCH/PSYCH 120 – THE ART AND SCIENCE OF HUMAN FLOURISHING**

3 credits.

Explore perspectives related to human flourishing from the sciences and humanities; investigate themes such as transformation, resilience, compassion, diversity, gratitude, community; expand self-awareness, enhanced social connectivity, and ability to change; formulate a sense of what it means to lead a flourishing life that sustains meaningful and fulfilling engagement with studies, relationships, community, and career.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 125 – THE WISCONSIN EXPERIENCE SEMINAR**

1 credit.

Examine transition to UW-Madison through exploration of the research university and the Wisconsin Experience. A variety of texts, including a novel and textbook, will provide a context for discussion, writing, and experiential assignments.

**Requisites:** First year students or first year transfer students only

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 200 – LGBTQ+ PEOPLE AND MENTAL HEALTH EQUITY**

3 credits.

Theories and research concerning the reasons for sexuality and gender mental health disparities; the significance of contemporary and historical debates over inequality; policies and practices to reduce inequality in health care for LGBTQ+ people.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No



### **COUN PSY 225 – INTERSECTIONALITIES, SELF AWARENESS, AND SOCIAL ACTIONS FOR SOCIAL CHANGE**

3 credits.

An introduction to the intersectionality framework in the United States to enhance skills necessary for culturally responsive awareness and interactions, with specific emphasis on how to think critically about and hold multiple perspectives and how to prepare for service learning. In addition to learning how contexts and social histories matter to situate an understanding of experience, develop self-awareness and understanding of social location as well as learn how contextual factors shape identity, opportunities, and barriers for others. Relevant for all students of different identities, backgrounds, and experiences, who are interested in developing their awareness, knowledge and skills with multiculturalism and diversity.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **COUN PSY 230 – RACE AND THE DEVELOPING CHILD**

3 credits.

Children's psychological experience of racial, ethnic and cultural (REC) status, development of their understandings of REC, and implications of this development for discussing, dialoguing, and working with REC diversity with an emphasis on educational contexts.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **COUN PSY 237 – MENTAL HEALTH, SELF-AWARENESS, AND SOCIAL JUSTICE: WORKING IN DIVERSE COMMUNITIES**

3 credits.

Designed to increase knowledge, awareness, and skills of students interested in working on mental health matters within diverse identity groups and communities. Conceptualize mental health and well-being across communities in terms of (a) intersectional identities (individual and groups), (b) mental health and access and utilization of services, and (c) social determinants of health in different contexts and settings. Engage in reflective exercises to understand how their social identities influence their work in different types of communities.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **COUN PSY 300 – SPECIAL TOPICS: COUNSELING AND COUNSELING PSYCHOLOGY**

1-4 credits.

Examines various special topics in Counseling and Counseling Psychology. Students need to submit an application and have sophomore standing in order to be considered for this class.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **COUN PSY 325 – SEMINAR: STUDENTS SEEKING EDUCATIONAL EQUITY AND DIVERSITY (SEED)**

3-4 credits.

Use personal experiences, readings, and discussions as frameworks for interrogating social, cultural, and political inequities. Engage in dialogues and experiential activities about social differences to promote critical consciousness and intercultural competence across disciplines.

**Requisites:** Sophomore standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **COUN PSY/CHICLA 331 – IMMIGRANT HEALTH AND WELLBEING**

3 credits.

Develop an understanding of immigrant health in the United States from the perspective of social and structural determinants. Applies concepts to a comprehensive framework for the development of health. Describes health assets and risks for specific vulnerable immigrant groups, such as women, children, and undocumented individuals and mixed immigration status families. Provides guidelines for improving immigrant access to quality health care, including language services, provider competence, policy and organizational supports, and community-based collaboration, advocacy, and research.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **COUN PSY 332 – GENDER AND QUEER ISSUES IN PSYCHOLOGY**

3 credits.

Explore history, theory, and research related to the psychology of gender and sexuality. A feminist approach is used to deconstruct gender and sexuality within the field of psychology and other mental health fields. Discussions include challenging the current system of psychology, while also integrating concepts to work within the system. An applied approach is used to encourage participation in activities to integrate activism and knowledge into professional identity, bringing in experiences from field placements, internship, and/or places of employment.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COUN PSY 333 – ASIAN AMERICAN PSYCHOLOGY**

3 credits.

Examines the personality and mental health issues of Asian Americans. Special emphasis is given to how minority group status, adaptation processes, and bicultural development influence various aspects of psychological functioning. Specific topics include stereotypes and racism, acculturation and enculturation, cultural values/behavioral norms, family roles, ethnic identity development, communication styles, gender and interracial relationships, academic and career achievement, stressors and social support systems within Asian communities, psychopathology, and culturally competent mental health treatment and service delivery.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**COUN PSY/ELPA 350 – PEER LEADERSHIP AND MENTORSHIP WITH TRANSITIONING STUDENTS**

1 credit.

Examines student development in the first college year and strategies upper class students can utilize to be effective leaders and mentors of new students.

**Requisites:** Sophomore standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**COUN PSY 372 – PSYCHOLOGY OF MINDFULNESS**

3 credits.

An academic and experiential introduction to mindfulness meditation framed within the perspective of psychology is provided. Scientific research and modern meditation instructions that have formed the basis of a variety of secular mindfulness-based interventions are reviewed. Readings will adopt a variety of perspectives and methodologies, including conceptual/theoretical work, clinical trials, review articles including meta-analyses (i.e., aggregating findings across studies), and measurement-oriented studies. Key topics include: Buddhist and historical underpinnings of secular mindfulness-based stress reduction (MBSR) and similar interventions (e.g., lovingkindness and compassion-based meditation), and empirical literature pertaining to neuroscientific and clinical effects of mindfulness training and related interventions.

**Requisites:** PSYCH 202, KINES 150, RP SE 505, COUN PSY 237 or 531**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COUN PSY 500 – RADICAL HEALING AND ETHICS OF BILINGUAL LATINX TRAINING**

1 credit.

Provide the philosophical foundations and ethical considerations for delivering culturally- and linguistically-appropriate mental health support to multilingual Latinx communities. Build a foundational knowledge of liberatory philosophy, community-engaged work that promotes radical healing, review the ethical codes relevant to their field of study, and discuss how professional values and ethical mandates relate to Latinx cultural values and multilingual psychological service delivery.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**COUN PSY/CHICLA 525 – DIMENSIONS OF LATIN@ MENTAL HEALTH SERVICES**

3 credits.

Provides training for students who aspire to one of the helping, health, or mental health professions and who currently work or who envision themselves working with Latin@ populations. Provides important frameworks for working with Latin@s, including cultural, spiritual, linguistic and historical features relevant to this population and begin to apply their knowledge in service learning placements.

**Requisites:** Junior standing or 6 credits of CHICLA**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**COUN PSY 531 – PREVENTION AND INTERVENTION IN MENTAL HEALTH ACROSS THE LIFESPAN**

3 credits.

Introduction to mental health concerns and wellbeing, protective and risk factors, and the design and outcomes of evidence-based intervention and prevention programs to promote behavioral and emotional wellbeing across the lifespan. Focus on individual, family, and community health, with particular attention to socioeconomic, cultural, social, and structural mechanisms. Provides an overview of mental health outcomes and prevention programs or interventions aimed to prevent or ameliorate mental illness and distress, and promote positive mental health across the lifespan, including description of issues related to the design, implementation, and evaluation of prevention and intervention programs.

**Requisites:** KINES 150**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**COUN PSY 550 – STRENGTHENING LATINXS**

3 credits.

Develop proficiency in conducting basic psychotherapeutic helping skills in Spanish through role-plays and specialized training that integrates Latinx psychological theories into practical clinical interventions. Demonstrate advanced Spanish proficiency on ACTFL Proficiency Placement Exam

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**COUN PSY 575 – LATINX FOUNDATIONAL PRACTICUM: CASE CONCEPTUALIZATION**

1 credit.

Examine the mental health treatment and practice implications of working with Spanish-speaking Latinxs through a culturally affirming, linguistically appropriate, and strengths-based approach. Evaluate different counseling strategies and develop skills to understand and assess Latinx mental health to appropriately guide treatment. Foster reflexivity and examine one's own sociopolitical positionality and influence on the process of psychotherapy with Latinxs.

**Requisites:** CHICLA/COUN PSY/CHICLA 525 and COUN PSY 550**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COUN PSY 580 – LATINX ADVANCED PRACTICUM: TREATMENT PLANNING & INTERVENTIONS**

1 credit.

Examine the mental health treatment and practice implications of working with Spanish-speaking Latinxs through a culturally affirming, linguistically appropriate, and strengths-based approach. Evaluate different counseling strategies and develop skills to understand and assess Latinx mental health to appropriately guide treatment. Foster reflexivity and examine one's own sociopolitical positionality and influence on the process of psychotherapy with Latinxs.

**Requisites:** COUN PSY 575**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COUN PSY 601 – BEST PRACTICES IN COMMUNITY-ENGAGED SCHOLARSHIP**

2 credits.

Community-engaged scholarship (CES) captures a broad understanding of the possibilities to learn, teach, and do research through academic-community collaboration. CES encompasses the interaction known as "service-learning" or "community-based learning" (CBL) as well as complex models of academic-community engagement known as "community-based research" or "participatory action research." Staff members from the Morgridge Center for Public Service (MCPS) will introduce the concepts and models of CES, discuss the importance of building and maintaining community relationships, identify challenges and solutions in implementing CES, and assist you in creating your own course, project, or proposal.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**COUN PSY 620 – SPECIAL TOPICS IN COUNSELING AND GUIDANCE**

1-6 credits.

Instruction and/or practice in specialized counseling approaches, strategies, and techniques; working with various populations of clients served by counselors.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COUN PSY 650 – THEORY AND PRACTICE IN INTERVIEWING**

3 credits.

Theoretical bases for conducting interviews; types of interviewing; introduction to counseling and interviewing techniques. Limited opportunity to practice.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2019

**COUN PSY 655 – CLINICAL COMMUNICATION SKILLS**

3 credits.

Designed to help students develop an understanding of the clinical communication process, introduce applications of this process in a variety of contexts, and practice and develop clinical communication skills. Gain familiarity with research and theory on communication in a variety of clinical settings. Provides didactic and experiential training in developing basic competencies in clinical communication and listening skills, including personal and cultural characteristics that impact the communication process.

**Requisites:** Not open to students with credit for COUN PSY 650

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 665 – CAREER DEVELOPMENT THROUGHOUT THE LIFE SPAN**

3 credits.

We are all engaged with, and affected by, the world of work. Career development is a lifelong process that includes tasks and decision-making related to: selecting our dream job at age five, planning our major in college, transitioning to a new field, working as career counselors, and planning for retirement. Surveys foundational and emerging career development theories and interventions. A key component includes exploration of how knowledge from career development scholarship can be applied to students' own lives within a changing socioeconomic context. Requires reflection on personal development (e.g., personalities, identities, life experiences, cultures, interests, skills, needs, and values) and apply this self-knowledge to engage career exploration and planning.

**Requisites:** Junior standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**COUN PSY 699 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 700 – PRACTICUM ACTIVITIES**

1 credit.

The foundation structure for first-year Master's students to complete their required 40 hours of practicum. Develop the conceptual and administrative skills to complete practicum hours in collaboration with Counseling Psychology courses and their specific activities. Focuses on gaining the requisite developmental skills to prepare for and practice individual counseling-like interviews with student volunteers.

**Requisites:** Declared in Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA/RP & SE 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY/ED PSYCH 723 – DEVELOPMENTAL PROCESSES ACROSS THE LIFE SPAN**

3 credits.

Life-span perspective on studying individual development from conception to death. Emphasis on multidisciplinary, multidirectional, and contextual approaches to physical, psychological, social, and intellectual developmental processes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COUN PSY/ED PSYCH/HDFS 726 – ETHNIC AND RACIAL DIVERSITY IN SOCIAL DEVELOPMENT**

3 credits.

Review of empirical and theoretical research on ethnic/racial diversity in social development across childhood, adolescence and early adulthood with emphasis on implications for counseling and school psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**COUN PSY/PSYCH/RP & SE 729 – ADVANCED SOCIAL PSYCHOLOGY**

3 credits.

Intensive examination of theoretical conceptions in contemporary social psychology, including learning-theoretic, reinforcement, incentive, cognitive, and psychodynamic approaches, and research in selected topic areas reflecting these approaches, such as aggression, attitude formation and change, conformity, limitation and modeling, interpersonal attraction, perception of others, prosocial behavior, and social influence.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **COUN PSY/RP & SE 730 – PROFESSIONAL COUNSELING ORIENTATION**

3 credits.

Provides a broad understanding of professional counselor roles and functions. Also provides a broad understanding of the ethical and legal standards for professional counselors. Gain familiarity with the ACA Code of Ethics, as well as with credentialing standards and organizations relevant to the practice of mental health counseling.

**Requisites:** Declared in a Rehabilitation Psychology or Counseling Psychology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **COUN PSY/ED PSYCH/RP & SE 736 – SEMINAR IN PSYCHOLOGY OF INDIVIDUAL DIFFERENCES**

3 credits.

Seminar in the psychology of individual differences, providing broad and general coverage of theory and research related to individual and cultural differences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **COUN PSY/ED PSYCH/RP & SE 737 – SEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY**

3 credits.

Seminar in the history of psychology, providing broad and general coverage of the development of psychology as a scientific discipline. Includes coverage of philosophy of science and systems of psychological inquiry, with applications to current research in psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **COUN PSY 740 – ABNORMAL BEHAVIOR AND PSYCHOPATHOLOGY**

3 credits.

Covers the research and theory of abnormal psychology, including etiology, manifestation, and diagnosis of mental health disorders. Emphasizes research on developmental psychopathology and cultural issues in assessment and diagnosis.

**Requisites:** Declared in Counseling, Counseling Psychology, Rehabilitation Counseling, or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **COUN PSY 745 – CLINICAL MENTAL HEALTH COUNSELING: DIAGNOSIS AND TREATMENT PLANNING FOR COUNSELORS**

3 credits.

Examine the treatment and practice implications of different mental health diagnoses and adjustment disorders. Reviews advanced principles of mental health diagnoses based on DSM 5 and ICD 10 nomenclatures and contextualizes this review for the practice of counseling applied and adapted for a diversity of clients and communities. Additionally, counseling strategies are reviewed for challenges with adjustment within various sociocultural contexts. Review empirically supported interventions for specific disorders as well as common factors that have been empirically supported as efficacious across disorders. Includes an examination of the cultural foundation of the counseling profession's and clients' explanatory models for (a) psychological and mental health distress as well as (b) healing and treatment strategies.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **COUN PSY 755 – SEMINAR ON META-ANALYSIS**

3 credits.

Focus on meta-analysis, a set of techniques for synthesizing the results of multiple studies addressing the same research question. Conduct a "mini" meta-analysis in an area of interest.

**Requisites:** ED PSYCH 761

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **COUN PSY 777 – CRISIS AND TRAUMA COUNSELING**

3 credits.

Counseling approaches that effectively address crises and trauma, exploring the impact of trauma and crisis and potential neurobiological responses, the development of skills and techniques for assessment and intervention in specific crisis or trauma situations including suicide assessment and intervention.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA/RP & SE 788 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS I**

3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA/RP & SE 789  
– QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD  
METHODS II**

3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/  
COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 791 – FOUNDATIONS OF CLINICAL MENTAL HEALTH  
COUNSELING**

3 credits.

History development of profession; professional ethics; credentialing; major theories models; roles; and principles including prevention, intervention, consultation, education, advocacy, systems promoting mental health and well-being.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 800 – THEORIES OF COUNSELING**

3 credits.

Historical and philosophical foundations of counseling. Examination of individual counseling theories, research, roles and practices within the counseling profession.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 801 – ASSESSMENT AND TESTING IN MENTAL HEALTH  
COUNSELING**

3 credits.

Reviews the procedures, approaches, theories, and applications associated with the educational and psychometric appraisal of groups and individuals; methods for collecting and evaluating data including validity, reliability and other psychometric properties; social and cultural and other factors associated with evaluating individuals and groups.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**COUN PSY 802 – GROUP DYNAMICS PROCESSING AND  
COUNSELING**

3 credits.

Reviews practice, theory, and research on group development, dynamics, and group counseling theories; group leadership styles; basic and advanced group counseling methods and skills; and other group approaches.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 804 – RESEARCH AND EVALUATION IN MENTAL  
HEALTH COUNSELING**

3 credits.

Reviews research design, implementation, report writing, and publication; basic statistics; program evaluation; needs assessment; and ethical and legal considerations.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2015

**COUN PSY 805 – HELPING RELATIONSHIPS AND TECHNIQUES**

3 credits.

Understanding and development of basic and advanced helping, interviewing, and counseling skills; consultation theory and application; development of counselor and client self understanding; facilitation of client or consultee change.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 806 – SUPERVISED PRACTICUM IN COUNSELING**

3 credits.

Introduction to psychotherapy. See volunteer clients and receive individual and group supervision related to their work with volunteer clients. Receive specialized training in case conceptualization and integrating theory into the specific interventions they are using with their volunteer clients.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 808 – SUPERVISED INTERNSHIP IN COUNSELING**

2-5 credits.

Supervision of Master's internship counseling experience.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate  
coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**COUN PSY 810 – PROFESSIONAL DEVELOPMENT AND CLINICAL PRACTICE**

1-6 credits.

Full-time involvement. Various assignments. Requires participation in a concurrent seminar.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 825 – COUNSELING PSYCHOLOGY TECHNIQUES WITH FAMILIES**

3 credits.

Approaches to counseling intervention for families across the life-cycle. Specific attention paid to family stress.

**Requisites:** Declared in Counseling, Counseling Psychology, Rehabilitation Counseling, or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 850 – MENTAL HEALTH CONSULTATION IN HEALTH SERVICE PSYCHOLOGY**

3 credits.

Provides an opportunity to understand and practice the process of consultation and to experience how the role of a consulting psychologist differs from other professional roles (i.e., clinician, supervisor, administrator). Includes a review of consultation models and theories for individuals, groups, and organizations, the fundamentals of program development and evaluation, and considerations for working within communities as a consulting psychologist. Additionally, students will begin to explore the role of the clinical supervisor, supervisor development, and models of supervision.

**Requisites:** Declared in Counseling, Counseling Psychology, Rehabilitation Counseling, or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 860 – SOCIAL AND CULTURAL FOUNDATIONS OF COUNSELING**

3 credits.

Review of theory and research into social identity and cultural foundations of counseling including: (a) the societal context for bias, discrimination and differential treatment of sociocultural groups including but not limited to diversity of sexual orientation, gender expression, social class, cultural/ethnic/racial groups, ability status among other groups; (b) human diversity in social norms, cultural values, social identities, as well as intergroup and intragroup relations; (c) counselors' roles in developing cultural competence, reducing bias and discriminatory treatment of subgroups, and advocating for social justice; and (d) the practice implications of for providing cultural competence in serving across forms of sociocultural diversity.

**Requisites:** Declared in Counseling, Counseling Psychology, Rehabilitation Counseling, or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 865 – LIFESTYLE AND CAREER DEVELOPMENT**

3 credits.

Theoretical and practical foundations relating to the practice of lifestyle and career counseling, career guidance, and career development.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 890 – ADVANCED ASSESSMENT TECHNIQUES IN COUNSELING PSYCHOLOGY**

3 credits.

Methods commonly employed by counseling psychologists in the assessment of the problems of living of normal adults. Diagnostic assessment and assessment of career interests, personality, behavior, and social environment. Development of written individual assessment reports.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 900 – COUNSELING PSYCHOLOGY PRACTICUM-- FOUNDATIONAL**

3 credits.

Foundational practicum and seminar in counseling psychology.

**Requisites:** Declared in Counseling Psychology

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 901 – COUNS PSYCH PRACT: GROUP COUNSELING, CONSULTATION, COLLEGE TEACHING**

1-6 credits.

Supervised practice in group counseling, consultation, and/or college teaching with a focus on psychosocial development and human relations.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**COUN PSY 902 – COUNSELING PSYCHOLOGY PRACTICUM IN SUPERVISION**

4 credits.

Practicum in supervising counselor trainees in laboratory and field settings.

**Requisites:** Declared in Counseling Psychology

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 903 – COUNSELING PSYCHOLOGY PRACTICUM--ADVANCED**

3 credits.

Advanced practicum and topical seminar in counseling psychology.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 904 – COUNSELING PSYCHOLOGY EXTERNSHIP**

1-3 credits.

Advanced training in counseling psychology assessment, intervention, and/or supervision.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**COUN PSY 905 – RESEARCH PRACTICUM IN COUNSELING PSYCHOLOGY**

3 credits.

Supervised research experience in the field of counseling psychology. Read about, discuss, and practice research skills that are critical at various phases of the research design and implementation process.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**COUN PSY 908 – PRE-DOCTORAL INTERNSHIP IN HEALTH SERVICE PSYCHOLOGY PREPARATION SEMINAR**

2 credits.

Provides preparation for application to predoctoral internship in Health Service Psychology. Includes modules designed to provide knowledge, skills, and information regarding the application, interview, and decision-making process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**COUN PSY/RP & SE 925 – SEMINAR IN COUNSELING PSYCHOLOGY**

3 credits.

History, ethical and professional issues and problems, and current status of the psychological specialty of counseling psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**COUN PSY 926 – SEMINAR IN ETHICAL AND PROFESSIONAL ISSUES IN COUNSELING PSYCHOLOGY**

3 credits.

Intended to strengthen students' identities as counseling psychologists. Includes examination of (a) historical and contemporary issues that have affected psychology; (b) training and practice guidelines; and (c) ethical and legal issues, including the American Psychological Association ethics code and ethical decision-making.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 950 – RESEARCH METHODS IN COUNSELING PSYCHOLOGY**

2-3 credits.

Historical, philosophical, descriptive, experimental, case-study and other models of research in counseling psychology.

**Requisites:** Declared in Counseling Psychology or Counseling

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**COUN PSY 951 – COUNSELING PSYCHOLOGY RESEARCH IN INDIVIDUAL INTERVENTION**

2-3 credits.

Theory and research related to the counseling dyad.

**Requisites:** COUN PSY 950

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**COUN PSY 954 – SEMINAR: TOPICAL RESEARCH IN COUNSELING PSYCHOLOGY**

2-3 credits.

Special topics in counseling psychology.

**Requisites:** COUN PSY 950**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2018**COUN PSY 956 – SEMINAR: RESEARCH IN VOCATIONAL PSYCHOLOGY AND CAREER DEVELOPMENT**

2-3 credits.

Theory and research in vocational behavior and career development.

**Requisites:** Declared in Counseling Psychology or Counseling**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**COUN PSY 960 – RESEARCH METHODS IN COUNSELING PSYCHOLOGY, II**

3 credits.

Advanced training in research methods in counseling psychology to build skills in conceptualization, research design, data analysis and interpretation.

**Requisites:** COUN PSY 950**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**COUN PSY 990 – RESEARCH OR THESIS**

1-12 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COUN PSY/ED PSYCH/PSYCH/RP & SE 995 – PREDOCTORAL INTERNSHIP**

0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**COUN PSY 999 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## CURRICULUM AND INSTRUCTION (CURRIC)

**CURRIC 209 – DIGITAL MEDIA AND LITERACY**

3 credits.

Explores theories of knowing and learning as they relate to digital media. Focused on digital media in all of its forms - from Wikipedia to YouTube mashups to mobile apps - and how these new ways of doing and making are related to learning.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 240 – CRITICAL ASPECTS OF TEACHING, SCHOOLING, AND EDUCATION**

3 credits.

Investigates aspects of social justice and equity as they relate to teaching, schooling, and education.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 243 – PRACTICUM IN WORLD LANGUAGES (K-12)**

3 credits.

Systematic observation and participation in world language classes (French, German, or Spanish) in the public school.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Fall 2020**CURRIC 276 – CONTEMPORARY ISSUES IN K-12 SCHOOLS**

1 credit.

Introduction to current practices and issues in K-12 school systems as they relate specifically to educational inequality, the concept of "educational debt," and the role of teachers and administrators in system change. Encourages future educators to think critically about these issues while preparing them to serve in culturally and socio-economically diverse schools.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CURRIC 277 – VIDEOGAMES & LEARNING**

3 credits.

Explores current research on videogames and learning. Critically reflect on the intellectual and educational merits and drawbacks of videogames and how videogame culture shapes how individuals think and learn.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 292 – GLOBALIZING EDUCATION**

3 credits.

Designed to explore the regionally, societally and culturally embedded nature of schooling, impacts of globalization on schooling, the relationship of schooling to increasingly global societies, and how policy, curriculum instruction, both domestically and internationally, are both shaped by and sometimes responsive to globalization.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC/MUSIC 300 – PRINCIPLES OF MUSIC EDUCATION**

2 credits.

Principles of music education, including philosophy, history, and current practices and curricular trends. Survey of music education in and out of schools as situated within diverse, pluralistic communities.

**Requisites:** Declared in Music: Education BM and sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC/MUSIC 301 – MUSIC LEARNING AND TEACHING 1**

2 credits.

The learning and teaching of music at the elementary and middle school levels.

**Requisites:** CURRIC/MUSIC/CURRIC 300 and concurrently enrolled in CURRIC/MUSIC/CURRIC 337 and declared in Music: Education

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC/MUSIC 302 – MUSIC LEARNING AND TEACHING 2**

2 credits.

The learning and teaching of music at the high school level.

**Requisites:** CURRIC/MUSIC/CURRIC 301 and CURRIC/MUSIC/CURRIC 337

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC/MUSIC 303 – FIELDWORK IN MUSIC COMMUNITIES**

1 credit.

Fieldwork in music communities in the Madison area.

**Requisites:** CURRIC/MUSIC/CURRIC 300 or concurrent enrollment

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Workplace – Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**CURRIC/MUSIC 304 – COMPOSITION, ARRANGEMENT, AND ORCHESTRATION FOR THE MUSIC TEACHER**

2 credits.

Introduction to the teaching of musical composition, arrangement, and orchestration. Special emphasis on how music technologies interact with conceptions of composition, arrangement, and orchestration; implications for music learning and teaching.

**Requisites:** MUS PERF 104

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 305 – INTEGRATING THE TEACHING OF READING WITH OTHER LANGUAGE ARTS**

3 credits.

Theory, research and instructional practices supporting the teaching of reading, writing, speaking and listening skills in an integrated curriculum from kindergarten through grade twelve.

**Requisites:** None

**Course Designation:** Gen Ed – Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC/CHICLA 306 – LATINX LITERACIES**

3 credits.

Addresses how members of Latinx communities have used writing for both personal and social change. Develop a deeper understanding of the political, family, and school contexts in which Latinx peoples in the United States write and read.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 309 – READING AND WRITING ACROSS THE CONTENT AREAS**

3 credits.

Prepares prospective teachers of children 8/9 to 12/13 to teach reading and writing across all content areas.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 311 – LANGUAGE ACQUISITION AND USE IN AND OUT OF SCHOOLS**

3 credits.

Explore theories of first and second language acquisition (SLA) and factors that impact language, literacy, and academic learning and development for emergent bilinguals (or English Learners). Develop an understanding of theories of language learning and development to build a theoretical foundation that will provide the basis for work with bi/multilingual learners. Analyze the language learning and language use of an emergent bilingual across multiple contexts at a practicum site. Consider the implications of theories for language learning and development for instructional design while learning research tools to enhance teaching practice.

**Requisites:** Declared in Elementary Education: Kindergarten - 9th Grade, BSE and English as a Second Language Minor

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 312 – ESL/BILINGUAL ISSUES**

3 credits.

Addresses social, cultural, and educational issues related to schooling for young English learners. Provides an overview of multiple factors that impact teaching and learning for these students. These issues include (but are not limited to): theories relating to language use and learning; registers and varieties of English; program structures and designs; school and classroom environments, and connections between families and schools.

**Requisites:** Declared in Elementary Education BSE, Capstone Certificate in Spanish-English Bilingual-Bicultural Education, Certificate in Preparing to Teach Abroad, or Certificate in Global Cultures, Languages and Education

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 314 – BECOMING LITERATE IN AND OUT OF SCHOOLS**

3 credits.

Surveys critical issues related to literacy for early childhood teachers including early literacy and language learning, insights into cultural differences related to literacy and language, and knowledge of the social dimensions of literacy.

**Requisites:** Declared in Elementary Education

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC 315 – READING AND WRITING ACROSS THE CURRICULUM IN EARLY CHILDHOOD**

3 credits.

Provides early childhood educators with information, strategies, and activities for instructing young children with literacy. Teachers explore the multiple sources of information that young readers must orchestrate as they learn to read.

**Requisites:** CURRIC 314

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 316 – ESL/BILINGUAL METHODS**

3 credits.

Identify and develop methodological approaches and techniques that coordinate instructional practice with current theories on language and learning. Develop criteria for designing, implementing, and evaluating appropriate lessons and materials that integrate with classroom curricula and goals.

**Requisites:** Declared in Elementary Education: Kindergarten - 9th Grade, BSE and English as a Second Language Minor

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 317 – DIMENSIONS OF LITERACY**

3 credits.

Surveys critical literacy issues for elementary teachers. Provides understandings related to literacy and language learning, insights into cultural differences related to literacy and language, and knowledge of the social dimensions of literacy. Addresses various theories that inform literacy teaching including deficit versus strength models of literacy learning, meaning-based models, systematic instruction, and sociocultural approaches.

**Requisites:** Declared in Elementary Education

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 318 – TEACHING READING AND WRITING**

3 credits.

Provides information and instructional strategies to support literacy learning. Addresses a wide range of literacy abilities including reading, writing, comprehending, and decoding. Focuses on the continuing developmental processes associated with becoming competent readers and writers.

**Requisites:** Declared in Elementary Education BSE

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 319 – PEDAGOGICAL CONTENT KNOWLEDGE FOR TEACHING ELEMENTARY MATHEMATICS 1**

3 credits.

Develops preservice teachers' mathematical knowledge for teaching i.e., Pedagogical Content Knowledge - the kind of knowledge that blends mathematical and pedagogical understandings. Explores topics defined by the Common Core State Standards for Mathematics such as foundations of arithmetic, addition, subtraction, multiplication and division of whole numbers and integers, the base-ten system, number theory, foundations of fraction operations and geometry.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and classified in pre-Elementary Education or declared in Elementary Education program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 320 – PEDAGOGICAL CONTENT KNOWLEDGE FOR TEACHING ELEMENTARY MATHEMATICS 2**

3 credits.

Further develop the pedagogical knowledge that elementary and middle school teachers need to appropriately understand and extend students' mathematical ways of knowing as defined by the Common Core State Standards. Critically reflect on personal assumptions about mathematics and think beyond standardized mathematical practices.

**Requisites:** CURRIC 319**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/CHICLA 321 – CHICANO/LATINO EDUCATIONAL JUSTICE**

3 credits.

Addresses the ways Chican@s/Latin@s in contemporary U.S. society have engaged in social, cultural, political, and ideological struggles for educational justice. Begins with a broad overview of educational issues and examines major social movements, legal cases, and local and national efforts that have established important precedents. Focus on different enactments of resistance, struggle, resilience, self-determination, and educational justice and focus on how these precedents and enactments pertain to teaching, learning, and curriculum practices that reflect key tenets of educational justice for Chican@/Latin@ students.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**CURRIC 325 – EDUCATING YOUNG ENGLISH LEARNERS**

3 credits.

Addresses social, cultural, and educational issues related to schooling for young English learners. Provides an overview of multiple factors that impact teaching and learning for these students.

**Requisites:** Declared in the Elementary Education: Early Childhood/English as a Second Language**Repeatable for Credit:** No**Last Taught:** Fall 2021**CURRIC 326 – LANGUAGE USE AND ACQUISITION IN EARLY CHILDHOOD**

3 credits.

Become familiar with aspects of forms and features of the English language and language use in and out of schools. Analysis of language learning and use across settings provides tools to enhance practice.

**Requisites:** Declared in the Elementary Education: Early Childhood/English as a Second Language**Repeatable for Credit:** No**Last Taught:** Spring 2022**CURRIC 327 – METHODS OF TEACHING YOUNG ENGLISH LEARNERS**

3 credits.

Identify, develop and implement methodological approaches and techniques for teaching English learners that coordinate instructional practice with current theories on language and learning.

**Requisites:** Declared in the Elementary Education: Early Childhood/English as a Second Language**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 328 – ARTS INTEGRATION FOR TEACHING AND LEARNING**

3 credits.

Prepares prospective educators to integrate the arts into their teaching practices.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 329 – TEACHING ARTIST PRACTICUM**

3 credits.

An opportunity to learn from professional teaching artists, continue to develop practical skills of teaching, and reflect on one's teaching artist practice. Participate in two different teaching artist residencies in order to learn a variety of disciplinary practices. Observe and assist the teaching artists and lead a portion of one class. Engage in collective reflection of residencies and explore relationship to theory. Address classroom challenges and establish the habits of ongoing reflection and effective pedagogical critique. Articulate a personal teaching artist statement, reflect on teaching experiences, and identify ways to make the arts accessible to diverse groups of learners.

**Requisites:** CURRIC 328**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 331 – TAKING EDUCATION OUTSIDE OF SCHOOL**

3 credits.

Education is often considered only to take place in formal schooling environments with professionally-trained teachers and students sitting in classrooms. However, research shows - and our intuitions suggest - that education occurs every day in a variety of ways, with a variety of people, and in a variety of spaces. For example, education - or more specifically, teaching and learning - happens in spaces such as museums and libraries but also, perhaps, at sports practice and around the family dinner table. Truly understanding what it means to teach and learn involves delving into and unpacking this variety. Further, if creating change in whether and how different people have opportunities to teach and learn in our society requires exposing and exploiting this variety.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**CURRIC 332 – TEACHING CHORAL MUSIC IN THE SECONDARY SCHOOL**

2 credits.

Materials and methods; organizing and administering the choral program; effective teaching and rehearsal techniques for choral groups.

**Requisites:** Declared in Music: Education BM

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**CURRIC/MUSIC 337 – PRACTICUM IN TEACHING MUSIC**

1 credit.

Observation and participation in K-12 music education settings.

**Requisites:** Declared in Music: Education and concurrent enrollment in CURRIC/MUSIC/CURRIC 301 or 302

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CURRIC 338 – THE LANGUAGE OF SCHOOLING**

3 credits.

Addresses aspects of forms, features and functions of the English language, including an understanding of multiple varieties and registers of English, and how language use functions in and out of schools. Attention to the emergent bilingual students' use of dual/multiple languages, varieties, registers, and discourses, relationships between first and additional languages, and ways to support students as they develop linguistic repertoires that include particular varieties of language that can help facilitate school success.

**Requisites:** Declared in Elementary Education: Kindergarten - 9th Grade, BSE and English as a Second Language Minor

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 339 – CULTURAL FOUNDATIONS OF LEARNING AND DEVELOPMENT**

3 credits.

Addresses core ideas of learning theory and human development focusing on the middle childhood population. Explores how learning and development are necessarily situated in local and global contexts, offering a cultural frame for understanding the work of teachers. Explores the cultural nature of learning and development and how these understandings can be applied to classroom practice.

**Requisites:** Sophomore Standing and classified as pre-Elementary Education or Declared in Elementary Education BSE

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 340 – ELEMENTARY EDUCATION PRACTICUM I**

3 credits.

Observe, supervise small groups, develop lesson plans for instruction, teach and assess a series of lessons in the related subject matter of science, social studies, literacy, and language acquisition.

**Requisites:** Declared in Elementary Education BSE

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 342 – TEACHING WORLD LANGUAGES (K-8)**

3 credits.

Designed for future teachers of world languages to build their philosophy of education and philosophy of teaching in conjunction with building practical knowledge about teaching and learning, professional standards, and issues facing schools. Provides opportunities to apply theories and standards through the practice of planning for language and child development through the creation of lesson plans, unit plans, and assessment creation. Pass oral proficiency exam, concurrent enrollment in CURRIC 243, and declared in French, German, or Spanish BSE

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**CURRIC 343 – TEACHING WORLD LANGUAGES (6-12)**

3 credits.

Theories, principles, and practical applications of instructional strategies and curriculum development for teaching a world language (Spanish, German, French, etc.) in secondary schools. Pass oral proficiency exam, concurrent enrollment in CURRIC 243, and declared in French, German, or Spanish BSE

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC/MUSIC 344 – TEACHING VOCAL STYLES IN THE MUSIC CLASSROOM**

1 credit.

Introduction to the teaching and learning of diverse vocal styles. Special emphasis on what makes each style distinct, as well as the acquisition practices associated with each style.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**CURRIC 357 – GAME DESIGN I**

3 credits.

Explores the fundamentals of game design. Develop fundamental skills in designing interactive systems (much as art students develop fundamental skills through courses in figure drawing or color theory). Applicable to careers in educational game design or in design fields in related settings, such as museums, theme parks, and technology-mediated classrooms.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 359 – TEACHING OF HISTORY AND THE OTHER SOCIAL STUDIES**

3 credits.

Develop lesson and unit plans, appropriate assessments, and understand what it means to teach social studies for democratic citizenship. Make connections between educational theory and the use of different pedagogical strategies, and be able to critically evaluate and discuss the assigned journal articles and book chapters.

**Requisites:** Declared in Curriculum and Instruction: Secondary Social Studies Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC/SLAVIC/THEATRE 362 – DRAMA FOR TEACHING AND LEARNING**

3 credits.

Methods for all involved in teaching and learning, including foreign languages. Introduction to philosophy, methodology, and practice of the use of drama and performance techniques in any educational or recreational settings. Focus on creativity and embodied and contextual learning, based on current neurological, psychological, and sociological research. A practical class which includes demonstration and practice with children.

**Requisites:** None

**Course Designation:** Breadth - Humanities  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC 363 – PRACTICUM IN EARLY CHILDHOOD EDUCATION IN KINDERGARTEN**

1-3 credits.

Observation and participation in a classroom setting. Reserve two mornings, two afternoons, or one full day.

**Requisites:** CURRIC 550 or concurrent enrollment

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 364 – INTRODUCTION TO EDUCATION**

3 credits.

Nature of teaching; fundamental issues which confront the teacher and bases for making decisions; overview of the program, field trips to educational sites.

**Requisites:** Declared in Elementary Education

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC/RP & SE 365 – TEACHING MATHEMATICS IN INCLUSIVE SETTINGS**

3 credits.

Introduction to a variety of approaches for teaching mathematics to students in inclusive schools

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 366 – INTERNATIONALIZING EDUCATIONAL KNOWLEDGE**

3 credits.

Internationalizing education means both internationalizing our thinking and the ways we perceive the world, and internationalizing the field of curriculum and instruction. An introduction to various educational systems around the world, focusing on similarities and dissimilarities in what is taught. Discussions center on curriculum across cultures, and its relation to political systems and religions to build an understanding of diversity in societies and schools. Explores local and indigenous knowledge; the role of international agencies in comparing nation's school systems; the rise of private schools and universities; immigration and the changing borders of society and cultures in the curriculum; questions of sexuality and gender diversity; diversity of families and social exclusions and inequalities in elementary and secondary schools; as well as international opportunities for study with international and local speakers from multiple perspectives.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 367 – ELEMENTARY EDUCATION PRACTICUM II**

3 credits.

Observe, supervise small groups, develop lesson plans for instruction, and teach a series of lessons in the related subject matter of math, literacy, language acquisition and inclusive schooling.

**Requisites:** CURRIC 340

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC 368 – THE TEACHING OF READING**

3 credits.

Examines the psycholinguistics of reading; reading in social and cultural contexts in schools, families, communities, and workplaces; and the politics of reading. Provides strategies for teaching all children to read.

**Requisites:** Declared in Elementary Education

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC 369 – THE TEACHING OF LANGUAGE ARTS**

3 credits.

Focuses on written and oral language development of children from infancy through early adolescence. Explores the cognitive, social, cultural, and political implications of literacy education.

**Requisites:** Declared in Elementary Education

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 370 – TEACHING MATHEMATICS**

3 credits.

Investigate the mathematics in the elementary school curriculum, how critical mathematics concepts and skills are learned, and how those concepts can be taught.

**Requisites:** Declared in Elementary Education BSE and (CURRIC 320 or MATH 132)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 371 – TEACHING SOCIAL STUDIES**

3 credits.

Examines recent trends in the field of social studies. Develop social studies curricula and instructional strategies that help prepare children for active citizenship in a democratic, multicultural, technological society.

**Requisites:** Declared in Elementary Education BSE

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 372 – TEACHING SCIENCE**

3 credits.

Explore how children learn science, how to create classrooms where children learn to inquire, and how to assess children's learning. Conduct inquiries as the basis for considering these issues.

**Requisites:** Declared in Elementary Education BSE

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 373 – ELEMENTARY TEACHING PRACTICUM III**

3 credits.

Observe, supervise small groups, develop lesson plans for instruction, and teach a series of lessons relating theories of learning with the subject matter of mathematics and art.

**Requisites:** Declared in Elementary Education

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 374 – GENERAL EDUC PRACTICUM & INSTRUCTIONAL PLANNING FOR DIVERSE LEARNERS**

2-5 credits.

Develop lesson plans, design an integrated curriculum unit, and employ active and collaborative learning strategies in general education classrooms.

**Requisites:** Declared in Special Education BSE

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 375 – PROSEMINAR**

1-3 credits.

Explore new frontiers in curriculum and instruction.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**CURRIC 390 – TEACHING OF SCIENCE IN SECONDARY SCHOOLS**

3 credits.

Explore teaching methods for secondary science education based on extensive research.

**Requisites:** CURRIC 290 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 393 – THE TEACHING OF SECONDARY SCHOOL MATHEMATICS I**

3 credits.

Provides an introduction to issues associated with mathematics curriculum and instruction in secondary schools. Instructional strategies, classroom management, and assessment of learning are examined in the context of current and reformed curricula.

**Requisites:** Declared in Curriculum and Instruction: Secondary Mathematics Education MS

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 394 – THE TEACHING OF SECONDARY SCHOOL MATHEMATICS II**

3 credits.

Provides a more in-depth examination of the issues associated with mathematics curriculum and instruction in secondary schools. A special emphasis is on curriculum choices and assessment practices.

**Requisites:** CURRIC 393 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 395 – USES OF TECHNOLOGIES IN SECONDARY SCHOOL MATHEMATICS**

3 credits.

An introduction to the calculator and computer technologies used in secondary school mathematics and to the ways these technologies can be used effectively in mathematics instruction. At least 3 required STATS courses at 300 level, and a fourth required course in Statistics or concurrent registration

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**CURRIC 396 – TEACHING OF ENGLISH**

3 credits.

Examine pedagogical and curricular issues related to the teaching of English Language Arts in secondary grades. Analyze and construct texts that address multiple aspects related to the teaching of English as reading the word and the world, while attending to notions of equity, cultural funds of knowledge, and strengths-based pedagogies. Use theory and practice to explore effective pedagogical strategies in the teaching of reading, writing, speaking, listening, and thinking using critical lenses

**Requisites:** Declared in Curriculum and Instruction: Secondary English Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 399 – INDEPENDENT STUDY**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**CURRIC/C&E SOC/ENVR ST 405 – EDUCATION FOR SUSTAINABLE COMMUNITIES**

3 credits.

How can education - for children and adults, in school and out - help to address crucial environmental and social sustainability challenges? What ideas and strategies have guided environmental and sustainability education over the years? What can individual people do to address environmental challenges, and what can only be accomplished by people working together? What does sustainability have to do with justice - and vice versa? Examine the principles behind behavior change and empowerment, community action and whole-scale social reform. Drawing on research and theory from across the social sciences, we will explore the uncertain relationship between education and advocacy, seeking the means by which education can have the greatest impact without compromising the core ideals of a democratic society.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC/RP & SE 406 – RACE, INTERSECTIONALITY, AND EQUITY IN EDUCATION**

3 credits.

Addresses a range of issues to help teachers more thoughtfully and equitably serve their students of color and develop a critical and historical understanding of the racism, marginalization, and exclusion that is endemic to the U.S. public school system. Provides an overview of foundational constructs that are essential for pre-service teachers preparing to teach and serve diverse students and families. Explore how race, racism, and racialization in education intersect with class, gender, dis/ability, religion, sexuality, etc. to shape inequitable schooling conditions and experiences for students of color. Analyze the effects at the individual, interactional, institutional, and societal levels. Consider how power always-already enables particular policies and practices that reproduce educational inequities and hence sustain white privilege and dominance.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC/MUSIC 409 – STUDENT TEACHING IN GENERAL AND VOCAL MUSIC**

6-12 credits.

Supervised student teaching in general and vocal K-12 settings.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC/MUSIC 410 – STUDENT TEACHING IN GENERAL AND INSTRUMENTAL MUSIC**

6-12 credits.

Supervised student teaching in general and instrumental K-12 settings.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 418 – PREPARING TO TEACH ABROAD**

3 credits.

Critically approaches a range of complexities entailed in teaching abroad. Power-knowledge relations in pedagogical acts of planning, implementation and reflection will be identified and analyzed. Several basic formats for lesson preparation will be introduced. A variety of teaching techniques for implementing lesson plans will be practiced with peers. Approaches for critically reflecting in verbal and written ways upon teaching/learning and power-knowledge relations integral to curriculum and instruction, student inclusion/exclusion, and cultural responsiveness will be surveyed.

**Requisites:** Sophomore standing**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 419 – PREPARING TO TEACH ABROAD CAPSTONE**

3 credits.

Formulate and reflect on the obligations and responsibilities of teaching in contexts different from the US. Capstone provides field experiences with virtual, community, and campus organizations relevant to planning curriculum, teaching, and cross-cultural comparison of educational contexts. Addresses colonization and power, assumptions of difference, and cross-cultural awareness in teaching and learning.

**Requisites:** CURRIC 418 and 366**Repeatable for Credit:** No**CURRIC/MUSIC 420 – TEACHING POPULAR INSTRUMENTAL MUSIC 1**

1 credit.

Development of critical perspectives, musical knowledge, and pedagogical skills needed to teach instrumental popular music. This class will focus on popular string instruments, their electronic counterparts, and emerging technologies for the performance and production of popular music.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC/MUSIC 421 – TEACHING POPULAR INSTRUMENTAL MUSIC 2**

1 credit.

Development of critical perspectives, musical knowledge, and pedagogical skills needed to teach instrumental popular music. This class will focus on popular percussion instruments, their electronic counterparts, and emerging technologies for the performance and production of popular music.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/THEATRE 426 – HISTORY, THEORY, AND DRAMATIC CRITICISM IN THEATRE FOR YOUNG AUDIENCES**

3-4 credits.

Historiographical perspectives in theatre for young audiences; analysis of plays for young people, theoretical implications, assumptions, current developments.

**Requisites:** THEATRE 160, 200, CURRIC/SLAVIC/THEATRE/CURRIC/SLAVIC 362, or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**CURRIC/CSCS 427 – METHODS OF TEACHING FAMILY AND CONSUMER EDUCATION**

3 credits.

Theory and principles of teaching and learning in family and consumer education.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2016**CURRIC/CSCS 428 – PROGRAM PLANNING IN FAMILY AND CONSUMER EDUCATION**

3 credits.

Theory and processes of program planning for formal and informal educational settings; relation of vocational education to secondary, adult, and continuing education programs.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Fall 2018**CURRIC 432 – GAME DESIGN II**

3 credits.

Explore the expressive, social, and cultural impact of games as a medium through focused creation of a single capstone project. Develop an analog or digital game depending on interest and skill set. Designed to build skills in designing interactive games using an iterative approach that incorporates user testing and feedback. Focuses on design practices common to all games which can be applied by a game designer working in any medium, including sports, board games, computer games, and videogames. Opportunities to explore a wide variety of independent games as well as the platforms used to create them.

**Requisites:** CURRIC 357 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **CURRIC 435 – FOUNDATIONS OF WORLD LANGUAGE EDUCATION** 2 credits.

Examines theoretical, pedagogical, and sociopolitical foundations for the teaching and learning of languages in U.S. schools.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **CURRIC 442 – STUDENT TEACHING IN WORLD LANGUAGES (PK-8)** 2-12 credits.

Practice teaching in world languages education classes at the PK-8 school level in elementary and middle schools.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **CURRIC 443 – STUDENT TEACHING IN WORLD LANGUAGES (6-12)** 2-12 credits.

Practice teaching in world languages education classes at the 6-12 school level in middle and high schools.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **CURRIC 454 – STUDENT TEACHING IN THE MIDDLE SCHOOL** 1-10 credits.

Supervised student teaching experience in elementary education located in a 5th-9th grade classroom.

**Requisites:** CURRIC 367 and concurrent enrollment in CURRIC 463

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CURRIC 458 – STUDENT TEACHING IN HISTORY AND SOCIAL STUDIES IN THE MIDDLE SCHOOL** 2-12 credits.

Supervised student teaching in the middle school. Employ and evaluate a variety of approaches to social studies curriculum and instruction.

**Requisites:** Declared in Curriculum and Instruction: Secondary Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CURRIC 459 – STUDENT TEACHING IN HISTORY AND SOCIAL STUDIES IN THE HIGH SCHOOL** 2-12 credits.

Supervised student teaching in the high school. Employ and evaluate a variety of approaches to social studies curriculum and instruction.

**Requisites:** Declared in Curriculum and Instruction: Secondary Social Studies Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **CURRIC/THEATRE 462 – THEATRE FOR YOUNG AUDIENCES: PRODUCTION** 3-6 credits.

A practical class: preparation and performance of a production for young audiences, with development and implementation of accompanying educational material.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

### **CURRIC 463 – SEMINAR IN ELEMENTARY EDUCATION** 1-2 credits.

Weekly workshop to provide an opportunity to develop skills as critically reflective practitioners and make specific plans for the full-time teaching experience.

**Requisites:** CURRIC 367 and concurrent enrollment in CURRIC 454, 464 or 468

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CURRIC 464 – STUDENT TEACHING IN THE ELEMENTARY SCHOOL** 1-10 credits.

Supervised student teaching semester of the elementary education program in a 4K-6th grade classroom.

**Requisites:** CURRIC 367 and concurrent enrollment in CURRIC 463

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CURRIC 466 – STUDENT TEACHING IN MUSIC-ELEMENTARY** 2-12 credits.

Supervised student teaching in music classes in elementary schools.

**Requisites:** Declared in Music: Education BM and senior standing

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017



**CURRIC 467 – STUDENT TEACHING IN MUSIC-SECONDARY**

2-12 credits.

Supervised teaching in music classes in secondary schools.

**Requisites:** Declared in Music: Education BM and senior standing**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**CURRIC 468 – EARLY CHILDHOOD/ENGLISH AS A SECOND LANGUAGE STUDENT TEACHING**

5-10 credits.

Student teaching specific to Early childhood/English as a Second Language certification

**Requisites:** CURRIC 367 and concurrent enrollment in CURRIC 463**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/MATH 471 – MATHEMATICS FOR SECONDARY SCHOOL TEACHERS**

3 credits.

Capstone for future middle and high school teachers, drawing connections between higher mathematics and school mathematics.

**Requisites:** (MATH 341, 375, or 421) and (MATH 461 or concurrent enrollment)**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 472 – STUDENT TEACHING OF ENGLISH IN THE MIDDLE SCHOOL**

2-12 credits.

Supervised student teaching in the middle school. Employ and evaluate a variety of approaches to English curriculum and instruction.

**Requisites:** Declared in Elementary Education or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/KINES 478 – ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in elementary school setting.

**Requisites:** None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/KINES 479 – MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in secondary school setting.

**Requisites:** None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 490 – STUDENT TEACHING IN SCIENCE IN THE HIGH SCHOOL**

2-12 credits.

**Requisites:** Declared in Curriculum and Instruction: Secondary Science Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC/ART ED 493 – PRACTICUM IN SECONDARY SCHOOL ART**

3 credits.

Observation and instruction of elementary and secondary pupils in a laboratory setting. Lecture and discussion of topics related to art instruction.

**Requisites:** Declared in Art Education BSE**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 494 – STUDENT TEACHING IN HIGH SCHOOL MATHEMATICS**

2-12 credits.

**Requisites:** Declared in Curriculum and Instruction: Secondary Mathematics Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 495 – STUDENT TEACHING IN SCIENCE IN THE MIDDLE SCHOOL**

2-12 credits.

Supervised student teaching at the middle school. Employ and evaluate a variety of approaches to science curriculum and instruction.

**Requisites:** Declared in Curriculum and Instruction: Secondary Science Education MS and CURRIC 390**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**CURRIC 496 – STUDENT TEACHING OF ENGLISH IN THE HIGH SCHOOL**

2-12 credits.

**Requisites:** Declared in Curriculum and Instruction: Secondary English Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 497 – STUDENT TEACHING IN MIDDLE SCHOOL MATHEMATICS**

4-12 credits.

Supervised student teaching at the middle school. Employ and evaluate a variety of approaches to mathematics curriculum and instruction.

**Requisites:** Declared in Curriculum and Instruction: Secondary Mathematics Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 500 – LITERACY AND LANGUAGE DEVELOPMENT**

3 credits.

Survey and critical analysis of language and literacy development in and out of school, with a focus on the elementary school years.

**Requisites:** Declared in Elementary Education or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**CURRIC/COMP SCI 502 – THEORY AND PRACTICE IN COMPUTER SCIENCE EDUCATION**

1 credit.

Computer science educational pedagogy and general teaching practices. Practical experience gained through tutoring students. Knowledge of object-oriented programming required.

**Requisites:** COMP SCI 300 or 302 or declared in Computer Science graduate program**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 503 – LITERACY ACROSS THE CURRICULUM**

3 credits.

Survey and critical analysis of theories and practices for literacy development across the curriculum. Reading, writing, oral language, and technology as situated in the content areas. Focus on middle and high schools.

**Requisites:** Declared in Elementary Education or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 504 – LITERACY ASSESSMENT AND INTERVENTION**

3 credits.

Theories and practices in regard to assessing and intervening in literacy development for a variety of different sorts of learners, including those facing various reading or writing difficulties.

**Requisites:** CURRIC 318 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**CURRIC/RP & SE 506 – STRATEGIES FOR INCLUSIVE SCHOOLING**

3 credits.

Comparison of historical and current practices in special education; legal, philosophical, and programmatic changes leading to inclusive models of education; emphasis on concepts of collaboration, cooperative learning structures, and curricular and instructional adaptations to accommodate learners with disabilities in general education classrooms.

**Requisites:** Sophomore standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 507 – INCLUSIVE EDUCATION IN SECONDARY SCHOOLS**

2 credits.

Comparison of historical and current practices in special education; legal, philosophical, and programmatic changes leading to inclusive models of education; emphasis on concepts of universal design for learning, methods of differentiation, collaboration among educators, and responsive instructional strategies for learners with disabilities in general education classrooms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 508 – IMPLEMENTING UNIVERSAL DESIGN: CURRICULUM DEVELOPMENT & ANALYSIS**

1 credit.

Engage in joint inquiry and analysis of curriculum, instruction, and assessment using principles of Universal Design and differentiation. Study and utilize collegial dialogue protocols to interrogate previously taught or anticipated units of instruction. Revise and refine universally designed curricula.

**Requisites:** Declared in Curriculum and Instruction: Secondary Education MS and CURRIC 507**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

**CURRIC 510 – COMMUNITY-BASED PRACTICUM**

1-4 credits.

Provides an opportunity to connect teaching and learning theory and research knowledge to community based settings. Explore how community education is organized and educational services are delivered. Interact with children and develop an identity as an educator. Develop the necessary knowledge and skills required to work with students and educational professionals in a supervised community-based educational setting.

**Requisites:** Declared in Curriculum and Instruction MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**CURRIC 511 – SCHOOL-BASED PRACTICUM**

1-4 credits.

Provides an opportunity to connect teaching and learning theory and research knowledge to the practical setting of schools. Explore how schools are organized and educational services are delivered. Interact with students and develop an identity as an educator. Develop the necessary knowledge and skills required to work with students and educational professionals in a supervised school-based setting.

**Requisites:** Declared in Curriculum and Instruction MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**CURRIC/ED POL/HISTORY/JEWISH 515 – HOLOCAUST: HISTORY, MEMORY AND EDUCATION**

3 credits.

Explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms.

**Requisites:** Junior standing**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC/ED POL/RELIG ST 516 – RELIGION AND PUBLIC EDUCATION**

3 credits.

Examines theories and practices related to the role of religion in public schooling and its accompanying tensions: political and philosophical, practical and personal.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science  
Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**CURRIC/THEATRE 525 – THEATRE IN EDUCATION**

3-4 credits.

Theory and practice of theatre in elementary and secondary educational settings. Devise, script, and present programs as actor-teachers and interact with audiences.

**Requisites:** Sophomore standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**CURRIC 534 – TOOLS FOR GAME DESIGN**

1 credit.

An introduction to tools used to design and develop video games.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 535 – FOUNDATIONS OF LITERACY**

2 credits.

Examines key arguments in literacy studies to help future teachers make intentional and informed decisions about teaching literacy.

**Requisites:** Declared in Curriculum and Instruction MS: Secondary Education Teaching Certification**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022

**CURRIC 536 – TEACHING DIVERSE YOUTH IN SECONDARY SCHOOL**

2 credits.

Designed to foster understandings of culturally relevant pedagogy and to promote cultural awareness at the individual and institutional levels, and equitable and anti-racist behaviors as well as social justice in educational practices. Examines the meanings of multicultural education to understand how teachers can encourage, develop, and support learning, and create practices that establish high expectations for all learners. Reflect on how individuals, schools, and other social institutions participate in maintaining the hegemony and power of whiteness, middle class power, ableness, heterosexuality, and speaking English well.

**Requisites:** Not open to students with credit for CURRIC 537**Repeatable for Credit:** No**Last Taught:** Summer 2015**CURRIC 537 – TEACHING DIVERSE LEARNERS**

3 credits.

Designed to foster cultural awareness at the individual and institutional levels, and to promote equitable and anti-racist behaviors as well as social justice in educational practices.

**Requisites:** Declared in Educational Psychology MS: Professional Educator (MSPE) MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2021**CURRIC 545 – TEACHING WORLD LANGUAGES I**

3 credits.

Fundamental elements of curriculum development, instruction, and assessment for teaching world languages in PK-12 contexts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CURRIC 546 – TEACHING WORLD LANGUAGES II**

2 credits.

Provides in-depth examination of the issues associated with elements of teaching world languages in PK-12 contexts. Focuses on classroom community and procedures as well as advanced elements of instructional design and assessment.

**Requisites:** CURRIC 545**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**CURRIC 550 – METHODS, MATERIALS AND ACTIVITIES IN EARLY CHILDHOOD EDUCATION**

3 credits.

Developing strategies for teaching young children. Relationships between development and culture, play, the variety of teachers' roles in learning, the functions of observation and assessment, developmentally appropriate practices, engaging children in their own learning, and constructing a curriculum unit.

**Requisites:** Declared in Elementary Education, Special Education, or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 559 – ADVANCED PRACTICES IN THE TEACHING OF SOCIAL STUDIES**

3 credits.

Explore research and practice on topics such as social studies instruction for diverse pupils, critical thinking, and authentic assessment.

**Requisites:** CURRIC 359 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/THEATRE 562 – DRAMA IN EDUCATION: ADVANCED STUDIES**

3-4 credits.

Advanced studies in theories and practices of drama in education.

**Requisites:** CURRIC/SLAVIC/THEATRE/CURRIC/SLAVIC 362**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**CURRIC 564 – ADVANCED PROBLEMS ON THE TEACHING OF WORLD LANGUAGES**

3 credits.

Recent developments in technologies and methods of teaching world languages; exploration and analysis of teaching practices; critical review of relevant literature and adaptation of materials; recent innovations in elementary and secondary world language teaching.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2022

**CURRIC 576 – TOPICS IN GAME DESIGN**

3 credits.

An exploration of theories, issues, and histories within a specialized area of game design such as developing games for a particular genre, for social impact, or using novel technologies.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 590 – ADVANCED PRACTICES IN THE TEACHING OF SCIENCE**

3 credits.

An extended and in-depth analysis of the key themes in science education introduced in the introductory methods course as well as an exploration of additional topics important to beginning science educators.

**Requisites:** CURRIC 390 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 596 – ADVANCED PRACTICES IN TEACHING ENGLISH IN SECONDARY SCHOOLS**

3 credits.

Explores central issues of theory and practice in the teaching of English in middle and secondary schools using an inquiry framework in which beginning and experienced teachers act as researchers.

**Requisites:** CURRIC 396 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 604 – SEMINAR ON LITERACY**

3 credits.

Examines current research on reading, writing and varieties of oral language from perspective of sociocognitive and sociocultural literacy studies. Explore various theories of school, community, and workplace literacy, different approaches to literacy pedagogy and curricula, assessment practices, and interventions for learners with various needs.

**Requisites:** CURRIC 318 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**CURRIC 606 – CRITICAL PERSPECTIVES ON DIGITAL MEDIA IN EDUCATION**

2-3 credits.

Critical review of literature on digital media and learning; utilization of digital media inside and outside classrooms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**CURRIC/LIS 620 – FIELD PROJECT IN LIBRARY AND INFORMATION AGENCIES**

3 credits.

Analysis of field experience through seminars, individual conferences, required reading and consultations with cooperating librarians and information specialists. Enrollment limited.

**Requisites:** LIS 601 and 602 or concurrent enrollment**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 625 – BILINGUAL-BICULTURAL EDUCATION PRACTICUM**

1 credit.

Field experiences that promote bilingualism-biculturalism and content area learning in K-12 schools; review of pedagogies and methodologies that support bi/multilingual pupils; application of effective pedagogies, methodologies, and instructional practices; taught in Spanish.

**Requisites:** CURRIC 671 or 676 or concurrent enrollment in CURRIC 671 or 676**Repeatable for Credit:** Yes, for 4 number of completions**CURRIC 626 – ACTION RESEARCH IN SCHOOLS**

3 credits.

Provides instruction and support for individual research on personal practices in schools.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**CURRIC 630 – PROFESSIONAL DEVELOPMENT FOR SCHOOLS AND COMMUNITY EDUCATORS**

1-6 credits.

Specific construction and theoretical implications for professional in-service and field student teaching assignments. Learning materials and school systems program needs for children.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 632 – LITERATURE AND LITERACY**

3 credits.

Role of literature in literacy development from pre-school to high school. Theories and practices in regard to interpretation, reader response, criticism, genres, multiculturalism, and literature for early literacy and in content learning.

**Requisites:** Declared in Elementary Education or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022

**CURRIC 635 – EPISTEMOLOGY OF MATHEMATICS FOR TEACHERS**  
2 credits.

Focuses on the nature of knowing mathematics.

**Requisites:** Declared in Curriculum and Instruction: Secondary Mathematics Education MS

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CURRIC 636 – MATHEMATICAL KNOWLEDGETEACHING**  
3 credits.

Addresses the mathematical concepts necessary for the effective instruction of number and generalization at the middle school level.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2016

**CURRIC 637 – MATHEMATICAL KNOWLEDGE FOR TEACHING: RATIOS AND PROPORTIONS**  
3 credits.

Addresses mathematical concepts necessary for the effective instruction of rational number and proportional reasoning at the middle school level.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**CURRIC 638 – MATHEMATICAL KNOWLEDGE FOR TEACHING: GEOMETRY AND MEASUREMENT**  
3 credits.

Addresses mathematical concepts necessary for the effective instruction of geometry, measurement, and trigonometry at the middle school level.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**CURRIC 639 – MATHEMATICAL KNOWLEDGE FOR TEACHING: ALGEBRA AND FUNCTIONS**  
3 credits.

Addresses mathematical concepts necessary for the effective instruction of algebra and functions at the middle school level.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2016

**CURRIC 640 – MATHEMATICAL KNOWLEDGE FOR TEACHING: CONJECTURING AND REASONING**  
3 credits.

Addresses mathematical concepts necessary for supporting students' abilities to conjecture, justify, and prove in middle-school mathematics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**CURRIC 660 – FOUNDATIONS OF EARLY CHILDHOOD EDUCATION**  
2-3 credits.

Trends, basic principles, issues, evaluation, and curriculum planning for the group education of preschool children.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 663 – LEARNING ENVIRONMENTS FOR INITIAL EDUCATION PROGRAMS**  
3 credits.

Historical foundations, basic theories, and contemporary patterns of instruction underlying educational programs for young children (3-9). Integrating and contrasting features of comprehensive curricula for the very young: play, communication, self concepts, health, arts, motor, literacy numeracy, science, and other areas of educational concern.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 665 – EARLY CHILDHOOD EDUCATION POLICY & PRACTICE**  
3 credits.

Explores theoretical, empirical and methodological perspectives that inform early childhood policy and practice in the U.S. Examine the programs, policies, persons, institutions, and practices serving children ages birth to age eight, with particular attention on the period of age 3-6.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No



**CURRIC 670 – THEORIES OF BILINGUALISM AND BILITERACY**

3 credits.

Study of contemporary theoretical perspectives, constructs, models, and frameworks related to bilingualism and biliteracy development and relationship between home/first languages (i.e., Spanish) and second/additional languages (i.e., English); review of cultural backgrounds and experiences, transnational experiences and mobility, and social and linguistic identities; application of theory to curriculum and instructional decision-making for K-12 bilingual learners; taught in Spanish. Demonstrate advanced-low Spanish language proficiency

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CURRIC 671 – EDUCATIONAL LINGUISTICS FOR BILINGUAL TEACHERS**

3 credits.

Study of applied linguistics in relation to Spanish, English, and bilingualism; introduction to the basic structures of language (i.e., phonetics and phonology, morphology and semantics, syntax, pragmatics); application of educational linguistics to curriculum and instructional decision-making for K-12 bilingual learners; taught in Spanish. Demonstrate advanced-low Spanish language proficiency

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CURRIC 673 – LEARNING SECOND LANGUAGE AND LITERACIES**

1-6 credits.

Explores theoretical and practical aspects of second language and literacy development in schooling for English learners. Includes a fieldwork component. Informed by theories, students conduct and analyze data from classroom-based research, investigating implications for learning and teaching.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 674 – ADVANCED METHODS IN TEACHING ENGLISH AS A SECOND LANGUAGE**

3-6 credits.

Designed to help identify/develop and implement methodological approaches and techniques for supporting the language and literacy development of English learners that coordinate with current theories on language and learning.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 675 – GENERAL SEMINAR**

1-3 credits.

Subjects of current interest. Recent topics have included educational linguistics, language awareness, understanding language, foundations in teaching English or social studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 676 – BILINGUALISM AND BILITERACY IN SCHOOLS**

3 credits.

Study of pedagogies, frameworks, and methodologies appropriate for bilingual-bicultural education; review of contemporary scholarship about rigorous, responsive, and effective practices with K-12 bilingual learners; review of Spanish and English language standards and bilingual standards-based teaching and learning; taught in Spanish.

**Requisites:** Declared in Elementary Education BSE, Capstone Certificate in Spanish-English Bilingual-Bicultural Education or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/ED POL 677 – EDUCATION, HEALTH AND SEXUALITY: GLOBAL PERSPECTIVES AND POLICIES**

3 credits.

Employs a lifecycle approach to examine issues at the intersection of education and health that people face throughout the world, but especially in lower-income countries. Particular attention is placed on sexuality education, reproductive health, and infectious disease epidemics.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2013**CURRIC 690 – INDEPENDENT FIELD WORK**

1-9 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**CURRIC 699 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**CURRIC 702 – SOCIOCULTURAL THEORY**

3 credits.

Sociocultural theories posit that the fundamental mechanism for teaching and learning is social interaction. Examine the varying positions within this generally body of theoretical literature, compare and contrast how each position construes the fundamentally social nature of thinking and learning, and consider the methods entailed by each given theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**CURRIC 704 – CURRICULUM PLANNING**

3 credits.

The concept of curriculum in modern American education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 709 – DIGITAL MEDIA & TECHNOLOGY IN SCHOOLS**

1 credit.

Introduction for secondary educators to the role of digital media technologies in their classrooms. Covers major topics in digital media in teaching and design several instructional units that incorporate technology meaningfully into the classroom.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CURRIC 711 – CULTURE, CURRICULUM, AND LEARNING**

3 credits.

Exploration of literature and recent debates related to cultural and linguistic diversity, learning, and instruction. Focuses on education within and across home, community, and school contexts, including a focus on home-school-community relationships.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**CURRIC 712 – INTRODUCTION TO CURRICULUM AND INSTRUCTION: RESEARCH AND RESOURCES**

3 credits.

Become familiar with faculty, procedures, policy, and the wide range of research in curriculum and instruction.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 713 – TECHNOLOGY INTEGRATION FOR TEACHING AND LEARNING**

1-3 credits.

A broad introduction to the field of Educational Communications and Technology (ECT) and attempts to balance theoretical inquiry with "hands on" design work. Cover the theoretical foundations of ECT and explore new developments in technology, theory and practice. Identifies new horizons for practicing and pre-service teachers to leverage technology for their own professional and personal empowerment through thinking systematically about technology and the classroom.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2020**CURRIC 714 – RESEARCH AND EVALUATION PARADIGMS IN CURRICULUM AND INSTRUCTION**

3 credits.

An analysis of differing orientations to evaluation and research. Emphasis on assumptions, attitudes, and expectations of what constitutes scientific knowledge and explanation; relationship of research orientation, methods of inquiry, theory, and practice.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**CURRIC 715 – DESIGN OF RESEARCH IN CURRICULUM AND INSTRUCTION**

3 credits.

Introductory survey of empirical foundations of research. Development of methods and tools of research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2014**CURRIC 716 – REFORM AND CHANGE IN CURRICULUM AND INSTRUCTION**

3 credits.

Social, political and epistemological assumptions underlying current efforts towards curriculum and instructional reform in elementary and secondary schools.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021

**CURRIC 718 – INTRODUCTION TO NARRATIVE INQUIRY**

3 credits.

Introduction to material on framing, generating, gathering, and analyzing stories that people tell.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC/COUN PSY/ED POL/ED PSYCH/ELPA/RP & SE 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 720 – SCHOOL PRACTICUM IN COMMUNICATION SCIENCES & DISORDERS**

5 credits.

Supervised experience in a public/private school setting with children manifesting speech, language and/or hearing problems. Involves evaluation and management of a variety of communicative disorders, as well as participation in the multi-disciplinary team process.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 721 – RESEARCH IN COMPUTING EDUCATION**

3 credits.

The history, theories, philosophies, tools, research, and technologies of Computing Education, with a focus on K-12 Computer Science Education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CURRIC 723 – LIFE HISTORY: THEORIES & METHODS**

3 credits.

Focuses on framing, generating, collecting, and analyzing data gathered from interviews and documents related to people's lives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**CURRIC 726 – QUALITATIVE METHODS OF STUDYING CHILDREN AND CONTEXTS**

3 credits.

Examines the theoretical, methodological, and ethical issues in studying children from interpretive perspectives. A small group research project, focused on examination of an individual child and context, provides an introduction to qualitative methods within fieldwork.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**CURRIC 727 – INTERNATIONALIZING EDUCATIONAL KNOWLEDGE**

3 credits.

Starts with a simple proposition that 19th century modern school curriculum is concerned with making kinds of people: "the citizen", "a worker", "civic minded", "life-long learner", "motivated", "with grit", etc. Discussions explore "the building (and disseminating) of knowledge" in schools (curriculum) across nations, cultures, and within political and religious modes of thought, to understand how differences in the self and others are produced through schooling. Internationalizing education means understanding how curriculum, pedagogy, theories of learning, and notions of childhood from schooling generate "ways of thinking" about "kinds of people". Internationalizing the field of curriculum and instruction shows how difference is produced and categorized. Facilitates thinking about how regional and national representations of people go unexamined in school curriculums when studying "others".

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 729 – CLASSROOM MANAGEMENT FOR SECONDARY EDUCATORS**

1 credit.

Designed to inform students of basic principles of good classroom management within a social justice framework. Learn about motivating student learning through clear classroom management strategies, communicating with parents and families regarding student behavior, establishing positive teacher-student relationships, responding to challenging student behaviors, and responding to bullying.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 731 – COLLABORATIVE TEAMWORK FOR INCLUSIVE SCHOOL REFORM**

3 credits.

Critically examine the process of collaboration and its multiple forms among professionals in the creation of inclusive school communities. Explore various methods and tools for collaboration that promote effective team relationships, problem solving, and co-planning of differentiated curriculum and instruction. Activities and projects are problem-based and focus on generating solutions to programmatic, student-specific, or school-wide issues related to inclusive education. Acquire skills to engage in collaborative teamwork and act as change facilitators within a school system.

**Requisites:** Declared in Educational Psychology MS: Professional Educator (MSPE) MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CURRIC 732 – FOUNDATIONS OF SCIENCE EDUCATION**

3 credits.

Examination of the interrelationships among education, science, and society in the United States since the mid-nineteenth century. Analysis of current issues and problems in science education from this historical perspective.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**CURRIC/STS 733 – PUBLIC ENGAGEMENT WITH SCIENCE**

3 credits.

Examines the influence of science in everyday life. Provides both academic context (research and theory) and a firsthand look at how science matters to people who are not themselves scientists.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC/STS 734 – SCIENCE STUDIES AND SCIENCE EDUCATION**

3 credits.

Examination of the key ideas from the field of science and technology studies (history, philosophy, sociology of science, etc.) and how they have been taken up in both the school science curriculum as well as the science education research community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 735 – EPISTEMIC PRACTICE AND SCIENCE TEACHING**

2 credits.

Pursues the following questions: Where does our scientific knowledge come from and how does science work to generate that knowledge? In what ways might science education meaningfully engage learners in science?

**Requisites:** Declared in Curriculum and Instruction: Secondary Science Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CURRIC 736 – EDUCATING LINGUISTICALLY AND CULTURALLY DIVERSE LEARNERS**

2-3 credits.

Overview of issues that influence and determine the language and academic development of English language learners. Explore social, cultural and educational contexts and practices as they relate to the education of this population.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 737 – LINGUISTICS FOR EDUCATORS**

2 credits.

An introduction to language, literacy and linguistic diversity for teachers. Provides an overview of the components of language, the structure of the English language and how language functions, with special emphasis on how language is used in schools, with the goal of supporting teachers' work with multilingual learners. Through exploration of language(s) and a critical reflection of personal experiences as language users, language learners, language analysts and language advocates, enhance understanding of communicative repertoires as dynamic, fluid, and complex.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CURRIC 739 – ASSESSMENT AND DATA USE FOR INSTRUCTIONAL IMPROVEMENT IN SECONDARY SCHOOLS**

1 credit.

Explores the four themes of evidence-based practice in teaching: 1) teaching with assessment in mind, 2) assessment for learning and assessment of learning, 3) constructing, modifying, and analyzing assessment, 4) making use of data about students to improve teaching and learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

### **CURRIC 743 – EDUCATIONAL TECHNOLOGY FOR DEEP LANGUAGE LEARNING**

1-3 credits.

Critical understanding of recent developments in research related to educational technology and its implications for World Language Education and Second Language Acquisition. Addresses the limits of instrumental reason and the need for reflective practice and theoretical wisdom for appropriate technology integration into teaching, global learning of other cultures, computer-assisted language learning (CALL), Computer-Mediated-Communication (CMC), learning languages in Multi-User Virtual Environments (MUVE), multimedia and emerging technologies in teaching languages and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2018

### **CURRIC 744 – PERSPECTIVES IN MULTICULTURAL EDUCATION**

3 credits.

A critical examination of the conceptual and theoretical traditions that contribute to the educational reform and ideology known as multicultural education. Includes readings from ethnic studies, black studies, feminist theory, antiracist pedagogy, bilingual education, and critical race theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **CURRIC/ELPA 746 – THE ADULT LEARNER: IMPLICATIONS FOR CURRICULUM AND INSTRUCTION**

3 credits.

Analysis of the principles and instructional models applicable to the instruction of adults. Attention to the integration of research on learning and teaching in informal and formal educational settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### **CURRIC 747 – MASTERS CAPSTONE IN TEACHER EDUCATION**

3 credits.

Develop and complete a synthetic, research-based project. Projects are individualized to professional interests and draw from the knowledge gained from previous coursework and the experiences in practicum and student-teaching placements in area schools.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **CURRIC/GEN&WS 760 – SEX/GENDER-RELATED ISSUES IN CURRICULUM AND INSTRUCTION**

3 credits.

A poststructural feminist analysis of educational discourse and practice; examines selected sex/gender issues in curriculum and instruction; explores some implications for classroom teaching of the complex interrelationships between sex/gender, race, social class, sexuality, and ability/disability.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **CURRIC 764 – GLOBALIZATION AND LINGUISTIC HUMAN RIGHTS IN EDUCATION**

2-3 credits.

An introduction to language instruction policies and linguistic human rights. Examines teaching and learning in a multilingual society. Explores the various dimensions of the language used in the schools for instruction in different countries during the globalization process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **CURRIC 765 – GLOBALIZATION AND TEACHING: DIMENSIONS FOR CURRICULUM PLANNING**

3 credits.

Critically examines efforts to introduce teaching and curriculum on globalization in elementary and secondary schooling, as well as in teacher education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **CURRIC 772 – LITERACY AS A CIVIL RIGHT**

3 credits.

Examine research and scholarship committed to ensuring access to critical literacies for all people and more specifically for youth who have been marginalized socially, educationally, economically, and politically in the context of the United States and abroad. Examine the significance of upholding literacy as "civil" and "human" rights. Explore the consequences of this ideology by considering what counts as literacy, who gets counted among the "literate," and how language and power impact education and schooling. Topics include tensions and conflicts in the teaching and learning of literacy in urban public schools and in out-of-school settings, youth entangled school-to-prison pipeline, youth-centered research methodologies, student-centered literacy education, and future directions for the field of language, literacy, and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No



**CURRIC 774 – LITERACY RESEARCH METHODS**

3 credits.

Introduction to a range of qualitative inquiry texts that examine the intersections of language, literacy, and culture. Examine ethnographies and case studies that ask questions about the literacy practices of children, youth, and adults in both schools and out-of-school contexts using critically conscious and humanizing research methodologies. Become knowledgeable about pivotal qualitative studies in language, literacy, and culture while developing a personal identity as a methodologist.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**CURRIC 775 – THEORIES OF RACE, RACISM, AND RACIALIZATION IN EDUCATION RESEARCH**

3 credits.

Studies of race-related issues in education often borrow from a narrow conceptual field that can limit how the researcher forms and investigates questions. It is important for education researchers to develop a solid conceptual understanding of race, racism, and racialization, and the analytical concepts that relate to these ideas determine appropriate questions and theories to apply to the analysis of educational phenomena. Bringing together concepts related to race, racism, and racialization via core conceptual literature from philosophy, sociology, and cultural studies supports the design of education research that attends to these issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 778 – TEACHING, LITERACIES, AND IDENTITIES**

3 credits.

Examines issues related to identity through three interrelated concepts--teaching, literacies, and diversity--from a variety of perspectives, including psychology, sociology, narrative studies, and sociocultural perspectives. Explore what "identity" means and how each conceptualization is related to teaching and learning, especially for children from diverse communities and backgrounds.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**CURRIC/COUN PSY/ED POL/ED PSYCH/ELPA/RP & SE 788 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS I**

3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC/COUN PSY/ED POL/ED PSYCH/ELPA/RP & SE 789 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS II**

3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 790 – MASTER'S PROJECT OR THESIS**

1-9 credits.

Planning and completing a master's project or thesis.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 799 – MASTER'S INDEPENDENT STUDY**

1-3 credits.

Student-designed opportunity to explore a subject in depth.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**CURRIC 802 – DISCOURSE ANALYSIS**

3 credits.

Theories and methods for analyzing "discourse" or language in use. Covers formal and informal written text, formal and informal oral speech, and face-to-face and online social interaction, with particular focus on cultural and social institutions and norms (such as school) and learning through social interaction.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**CURRIC/ED PSYCH/L I S 803 – COMPUTATIONAL RESEARCH METHODS**

3 credits.

Provides a broad overview of ways of formulating and investigating novel questions with tools from educational data mining and learning analytics including social network analysis, natural language processing, Markov modeling, Bayesian inference, and agent-based modeling.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 805 – GUIDING AND DIRECTING THE SCHOOL READING PROGRAM**

3 credits.

Issues and practices in reading program development from first through twelfth grade. Emphasis on the various roles and responsibilities of instructional leaders in reading program development.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 809 – POLITICS OF STEM EDUCATION**

3 credits.

In recent years, there has been an increase in attention to what has come to be known as STEM education in education circles and in the public sphere. Although this focus on STEM may seem recent, it is part of a long history of interest in the STEM disciplines. Consider STEM education from a political perspective by examining its histories, philosophies, policies, and effects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**CURRIC 810 – GOALS, CONTENT AND PROGRAMS IN MATHEMATICS EDUCATION**

3 credits.

Analysis of current programs and the identification of the mathematical content of K-12 education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**CURRIC 811 – THE INSTRUCTION OF MATHEMATICS**

3 credits.

Analysis of current research and examination of current programs to identify how they reflect different theories of learning and instruction.

**Requisites:** CURRIC 810**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**CURRIC 812 – CURRICULAR ISSUES IN MATHEMATICS EDUCATION**

3 credits.

Analysis of research and evaluation of programs as they operate within the school environment.

**Requisites:** CURRIC 811**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**CURRIC 818 – TEACHING CONTROVERSIAL ISSUES**

3 credits.

Critically examines different lines of research in controversial issues instruction such as the contextual factors affecting the teaching of controversial topics, and the instructional practices involved in teaching controversial issues. Contextual factors affecting teachers' decisions to teach controversial issues or topics include official curricular policies, community beliefs, emotional histories, and teachers' differing beliefs and sense of purpose. Examines the affordances and constraints of different pedagogical approaches to teaching controversial issues such as the use of discussion and deliberation, as well as pedagogies that recognize the importance of trust, power, emotion, and personal connections.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020

**CURRIC/ED PSYCH 821 – CONSTRUCTIONISM**

3 credits.

Survey of constructionist theory, research, and tools. Develop a deeper understanding of the history, theories, philosophies, tools, research, and technologies of constructionism and its children.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 823 – COLONIALITY OF LANGUAGE AND SCIENCE IN EDUCATION**

3 credits.

Explores interdisciplinary theories on coloniality used in education research, with a focus on historicizing and interrogating hierarchies of language, race, and scientific reason. Examines distinct analytics of power offered by raciolinguistic perspectives, postcolonial science studies, and postfoundational curriculum studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CURRIC 829 – PROSEMINAR IN AMERICAN CURRICULUM THEORY: 1890-PRESENT**

3 credits.

Major movements in the field such as Herbartianism, scientific curriculum planning, rational decision making, group process, and structure of the disciplines. Analysis of major documents and leading figures.

**Requisites:** CURRIC 662, 704, or 706

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 830 – THEORY AND DESIGN OF THE CURRICULUM**

3 credits.

Dimensions of theory and their interrelationships with reference to the curriculum field.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**CURRIC 832 – TEACHING FOR CONCEPTUAL CHANGE IN SCIENCE**

3 credits.

Examination of science teaching strategies and programs based on research into students' conceptions of natural phenomena.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**CURRIC 835 – FOUNDATIONS OF SOCIAL STUDIES EDUCATION**

2 credits.

Focuses on helping pre-service teachers understand what it means to teach social studies for democratic citizenship. Focuses on central debates within social studies education and considers how different national, historical, economic, and political contexts have shaped social studies curricula. Offers an opportunity to compare and contrast social studies education curricula and approaches in diverse national contexts.

**Requisites:** Declared in Curriculum and Instruction MS: Secondary Education Teaching Certification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**CURRIC 840 – FIELD WORK IN SCHOOL READING PROGRAMS**

2-7 credits.

Supervised field experience in working with school-wide reading programs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 844 – CULTURALLY RELEVANT PEDAGOGY**

3 credits.

Pedagogy that explores the relationships between culture and learning as well as teacher ideology and beliefs systems. Examines critical pedagogy and pedagogies of resistance.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**CURRIC/ED POL 855 – ISSUES IN ELEMENTARY EDUCATION**

3 credits.

Critical survey of issues and trends; their social, educational basis; implications for elementary schools; examination and analysis of major problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**CURRIC 860 – SUPERVISION IN TEACHER EDUCATION**

1-3 credits.

For those who are or wish to be university supervisors or cooperating teachers in practicum or student teaching programs. Study and discussion of factors which enter into the supervision of prospective teachers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 864 – SEMIOTICS FOR EDUCATION**

1-3 credits.

Dedicated to Semiotics or the study sign action for Education purpose, described as any activity or process including the production of meaning and apprenticeship.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**CURRIC 900 – ADVANCED SEMINAR IN DIGITAL MEDIA**

2-3 credits.

Survey and critical analysis of selected research and other literature in the major divisions of the field, with emphasis according to individual interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CURRIC 910 – SEMINAR-CURRICULUM DEVELOPMENT**

3 credits.

Examines the literature and debates that have arisen in the past three decades on what has come to be called the sociology of school knowledge and related areas. Devoted entirely to the topic of the relationship among policies, curriculum, teaching, and social relations of schools and differential power.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**CURRIC 912 – WRITING IN EDUCATIONAL RESEARCH**

3 credits.

Examination of substantive and stylistic elements of writing in the field of education research. Development of individual skills within and mastery through analysis, practice, and peer editing.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**CURRIC/COM ARTS 914 – HOW GAMES CHANGE US**

3 credits.

Video games can be powerful experiences that take us to new worlds, teach us about complex systems, and provoke a range of emotions. Games transform us while we play, and some of these changes can be hard to predict and understand. Games can disrupt our sense of self, reshape our pleasures and feelings, lead us to question deeply held values, and allow us to experience new forms of embodiment through an avatar. A growing body of research in game studies engages with this potential for expansive change by focusing on player experience from a variety of methodological perspectives, including phenomenological, feminist and queer theory, critical disability studies, learning sciences, ecocriticism, and media archeology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**CURRIC 916 – SMR: SPECIAL TOPICS IN RESEARCH & EVALUATION IN CURRICULUM & INSTRUCTION**

3 credits.

In the past few decades, social thought and philosophy have provided alternative arguments and styles of reasoning in thinking about the history and sciences of education. Explores readings and the importance of this literature to education is in multiple layers; provides ways of thinking about difference outside of theories of representation and identity; embodies ways of engaging the knowledge of science and the political in schooling; provides alternative strategies for discourse analyses; problematizes the givenness of the subject of schooling as the object of change; (re)vises notions of materialism and power in understanding the effects of schooling; provides ways of thinking about knowledge and language as not merely an epiphenomena to structures; and historically explores the limits of theories of practice that are given as what is real and useful.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**CURRIC/ENVIR ST 932 – FOUNDATIONS OF ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

3 credits.

Education is often portrayed as a critical part of the solution to the intertwined problems of environment and society. Examines environmental education and related traditions such as nature study, conservation education, and outdoor education, as well as more recent movements such as place-based education and education for sustainability. Grounds discussions in concrete examples of educational practice, considers historical and contemporary critiques of environmental education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**CURRIC 942 – SEMINAR IN RESEARCH ON MATHEMATICS EDUCATION**

1-3 credits.

Selected investigations; design of individual research activities.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**CURRIC 943 – MOBILITY, LANGUAGE & EDUCATION**

3 credits.

Engages in consideration of and deep dialog around cutting-edge theoretical approaches and framings to languages, literacies, mobility, communication, learning and teaching globally, and to show what different perspectives may offer to understandings of language-in-use across varied global educational and life contexts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**CURRIC 946 – PAST PERSPECTIVES ON MUSIC EDUCATION**

3 credits.

Analysis of music education in primary and secondary schools to 1980 via examination of historical, philosophical, and psychological sources. Explores ideas that have shaped the field in the past and investigates the influence of these ideas on current thinking.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**CURRIC 947 – CURRENT ISSUES IN MUSIC EDUCATION**

3 credits.

An exploration of current issues facing music education and an examination of future directions for the field. Identify and investigate individual topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 949 – SEMINAR IN THE STUDY OF TEACHER EDUCATION: PROFESSIONAL DEVELOPMENT**

3 credits.

Examination of issues in, and approaches to, design, implementation, and evaluation of professional development for inservice teachers.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**CURRIC 950 – SEMINAR IN THE STUDY OF TEACHER EDUCATION**

3 credits.

Examination of issues related to preservice teacher education and teacher education reform.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**CURRIC 955 – SEMINAR IN ADVANCED VALUES AND CHARACTER EDUCATION**

3 credits.

Pedagogical, psychological, and research issues associated with current approaches to values and moral education. Primary focus is on these issues as they relate to curriculum and instruction in public schools.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**CURRIC 960 – SEMINAR-SCIENCE EDUCATION**

1-3 credits.

Research methods in improving instruction in elementary and secondary science education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**CURRIC/ED POL 963 – SEMINAR-EDUCATIONAL PLANNING & CURRIC CHANGE-DEVELOPING COUNTRIES**

3 credits.

Analyses and critiques of educational plans related to the social, political, economic, and educational contexts of the target countries. Supervised practice in planning curricular change and educational reforms for particular countries in the light of realistic requirements and constraints.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**CURRIC 964 – SEMINAR IN WORLD LANGUAGE EDUCATION**

1-3 credits.

Develop a review of literature and a research project related to Second Language acquisition.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020

**CURRIC 975 – GENERAL SEMINAR**

2-3 credits.

For the exploration of new frontiers.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 976 – SEMINAR IN READING**

2-3 credits.

Series of advanced seminars on such topics as: diagnostic and remedial teaching; sociology of reading; developmental reading; linguistics in the teaching of reading; or others as designated.

**Requisites:** CURRIC 500 or 503**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**CURRIC 990 – DISSERTATION RESEARCH**

1-12 credits.

Planning and completing a doctoral dissertation.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**CURRIC 991 – POST-SECONDARY TEACHING PRACTICUM**

3 credits.

Opportunity to gain an understanding about the design and instruction of teacher education courses.

**Requisites:** Declared in Curriculum and Instruction PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**CURRIC 999 – DOCTORAL INDEPENDENT STUDY**

1-3 credits.

Student-designed opportunity to explore a subject in depth.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DAIRY SCIENCE (DY SCI)****DY SCI 1 – COOPERATIVE EDUCATION/CO-OP IN DIARY SCIENCE**

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working. The same work experience may not count toward credit in another course.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2018**DY SCI/AN SCI 101 – INTRODUCTION TO ANIMAL SCIENCES**

3 credits.

An overview of animal sciences covering anatomy, physiology, nutrition, reproduction, genetics, management, animal welfare, and behavior of domesticated animals. Food animals are emphasized to discuss their contributions to humans.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DY SCI/AN SCI 102 – INTRODUCTION TO ANIMAL SCIENCES LABORATORY**

1 credit.

Hands-on experience and demonstrations to develop practical skills with animals and to better understand the application of science to food production animals. It covers anatomy, physiology, nutrition, reproduction, genetics, management, animal welfare, and behavior of domesticated animals.

**Requisites:** AN SCI/DY SCI/AN SCI 101 or concurrent enrollment**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DY SCI 205 – DAIRY CATTLE IMPROVEMENT PROGRAMS**

2 credits.

Dairy cattle evaluation and selection, including: linear type appraisal, dairy cattle judging, mating programs, breed comparisons, cattle marketing, and national genetic improvement programs.

**Requisites:** AN SCI/DY SCI/AN SCI 101**Repeatable for Credit:** No**Last Taught:** Spring 2023

**DY SCI 233 – DAIRY HERD MANAGEMENT I**

3 credits.

Overview of practical dairy herd management with components of reproduction, nutrition, milk quality, raising dairy replacements, facilities and records. Laboratories emphasize practical applications, analyses of alternatives and decision making.

**Requisites:** AN SCI/DY SCI/AN SCI 101**Repeatable for Credit:** No**Last Taught:** Fall 2022**DY SCI 234 – DAIRY HERD MANAGEMENT II**

3 credits.

The second of a two course sequence designed as an overview of practical dairy herd management with components of animal welfare and handling, health, calf and heifer rearing, facilities and production economics.

Laboratories emphasize practical applications, investigation of alternatives and decision making.

**Requisites:** DY SCI 233**Repeatable for Credit:** No**Last Taught:** Spring 2023**DY SCI 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Honors research work under direct guidance of a faculty member in an area of Dairy Science. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 1998**DY SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Individual introductory to intermediate work under direct guidance of a faculty member in an area of Dairy Science. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DY SCI/AN SCI/NUTR SCI 311 – COMPARATIVE ANIMAL NUTRITION**

3 credits.

Nutrients and their source, assimilation, function and requirement.

**Requisites:** BMOLCHEM 314, CHEM 341, 343, or BIOCHEM 501**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DY SCI/AN SCI 320 – ANIMAL HEALTH AND DISEASE**

3 credits.

Provides an introduction to and exploration of the interconnectivity between factors that affect health and disease and the central role of the immune system using infectious disease in animals as a key focus. Explores principal causes and identification of animal diseases, common diseases of farm animals, zoonoses and public health, disease prevention and management including biosecurity measures and host immune responses. Fosters the appreciation for the translatability and universality of knowledge between human and animal health and disease.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**DY SCI/AN SCI 361 – INTRODUCTION TO ANIMAL AND VETERINARY GENETICS**

2 credits.

The molecular basis for inheritance of monogenic and polygenic traits related to animal disease and production. An introduction to the principles of improving animal health and performance by selection and mating systems in companion animals, horses, livestock, and poultry.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**DY SCI/AN SCI 362 – VETERINARY GENETICS**

2 credits.

The genetic basis for predisposition to disease or resistance to disease in livestock and companion animal species. Genetic defects, their discovery, diagnosis and treatment.

**Requisites:** AN SCI/DY SCI/AN SCI 361**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**DY SCI/AN SCI 363 – PRINCIPLES OF ANIMAL BREEDING**

2 credits.

Application of the principles of quantitative genetics to the improvement of livestock and poultry; breeding value estimation and selection techniques; effects of inbreeding and hybrid vigor; crossbreeding systems.

**Requisites:** AN SCI/DY SCI/AN SCI 361**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**DY SCI/AN SCI 370 – LIVESTOCK PRODUCTION AND HEALTH IN AGRICULTURAL DEVELOPMENT**

3 credits.

Physical, biological and social nature of animal agriculture systems and their improvement in developing countries; analysis of the state of livestock research and development in the developing countries and the world role of U.S. animal agriculture.

**Requisites:** AN SCI/DY SCI/AN SCI 101, BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 151, BIOLOGY/ZOOLOGY/BIOLOGY 101, or (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**DY SCI/AGROECOL/AGRONOMY 371 – MANAGED GRAZING FIELD STUDY**

1-2 credits.

For those interested in developing a comprehensive understanding of the principles, practices, and conservation potential of managed grazing systems, and how these farming systems may contribute to the sustainability and diverse tapestry of Wisconsin's working landscape. Visit managed grazing systems of successful grazing-based farmers (graziers) across southern/central counties in Wisconsin, and/or research sites at UW's Arlington and/or Lancaster Research Stations and/or the Discovery Farms Program. An opportunity to discuss at length with farm managers and researchers the practices in place at each farm and research site. Includes introduction to UWEX pasture forage/nutrient management planning and budgeting software.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**DY SCI/AN SCI 373 – ANIMAL PHYSIOLOGY**

3 credits.

Covers physiological processes that regulate the body and the anatomy and function of different physiological systems. Includes interactions between organ systems, analysis of a single organ system from the molecular to the organismal, and comparisons and contrasts of organ systems among different domestic animal species.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), or (BIOCORE 382, 383, and 384)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DY SCI 375 – SPECIAL TOPICS**

1-4 credits.

Various topics in Dairy Science of current interest to undergraduate students.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI 378 – LACTATION PHYSIOLOGY**

3 credits.

Focuses on lactation physiology across mammalian species. Structure and function of mammary glands; hormonal control of mammary development and lactation; cellular mechanisms of milk synthesis; the chemistry of milk synthesis; mastitis and other abnormalities of mammary functions.

**Requisites:** (BIOCHEM 301, 501, BMOLCHEM 314, or concurrent enrollment) and (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 382, 383, and 384), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DY SCI 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Animal and Dairy Sciences and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI 400 – STUDY ABROAD IN DAIRY SCIENCE**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**DY SCI/AN SCI 414 – RUMINANT NUTRITION & METABOLISM**

3 credits.

Integrates nutritional and biochemical concepts to understand digestive and metabolic processes in dairy and beef cattle, which are then quantitatively represented to predict and manipulate production and health outcomes.

**Requisites:** AN SCI/DY SCI/AN SCI/NUTR SCI 311, (BIOCHEM 301 or 501) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DY SCI/AN SCI 434 – REPRODUCTIVE PHYSIOLOGY**

3 credits.

Principles of reproductive physiology, improvement of fertility, and artificial insemination.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or (BIOCORE 382, 383, and 384) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DY SCI/AGRONOMY 471 – FOOD PRODUCTION SYSTEMS AND SUSTAINABILITY**

3 credits.

Delves into aspects of natural sciences (biology and agricultural sciences) and social sciences underpinning the assessment of food production systems as related to a variety of outcomes including but not restricted to human and environmental health, air and water quality, greenhouse gases emission, land use, economic opportunity, social justice, as well as mitigation and adaptation to climate change, locally, regionally, domestically, across continents, and globally.

**Requisites:** (Graduate/professional standing) or junior standing and satisfied Quantitative Reasoning (QR) B requirement

**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**DY SCI/AN SCI/FOOD SCI/SOIL SCI 472 – ANIMAL AGRICULTURE AND GLOBAL SUSTAINABLE DEVELOPMENT**

1 credit.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; food security, the role of women in agriculture, and the role of dairy products in a healthy diet.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**DY SCI/AN SCI/FOOD SCI/SOIL SCI 473 – INTERNATIONAL FIELD STUDY IN ANIMAL AGRICULTURE AND SUSTAINABLE DEVELOPMENT**

2 credits.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; and the role of women in agriculture and the role of dairy products in a healthy diet.

**Requisites:** DY SCI/AN SCI/FOOD SCI/SOIL SCI 472

**Repeatable for Credit:** No

**DY SCI 534 – REPRODUCTIVE MANAGEMENT OF DAIRY CATTLE**

3 credits.

Provides the technical knowledge and practical skills to design and execute an effective reproductive management program for dairy cattle. Study key reproductive physiology and practical research results that underlie reproductive management programs. Participate in hands-on laboratories to learn, practice, and demonstrate practical reproductive management techniques including: semen handling, artificial insemination, and ultrasound of ovaries and uterus.

**Requisites:** AN SCI/DY SCI/AN SCI 434

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DY SCI 535 – DAIRY FARM MANAGEMENT PRACTICUM**

3 credits.

Principles of nutrition, breeding, reproduction, and management at the farm level are integrated. Develop skills in decision making, information gathering, problem solving, and interpersonal communication through field trips to working commercial dairy operations.

**Requisites:** DY SCI 234 or GRAD

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DY SCI 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**DY SCI 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DY SCI 699 – SPECIAL PROBLEMS**

1-3 credits.

Individual advanced work in an area of Dairy Sciences under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI 799 – PRACTICUM IN DAIRY SCIENCE TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DY SCI/AN SCI 824 – RUMINANT NUTRITIONAL PHYSIOLOGY I**

4 credits.

Focuses on rumen microbiology, metabolite modeling, as well as protein and VFA nutrition and metabolism.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DY SCI/AN SCI 825 – RUMINANT NUTRITIONAL PHYSIOLOGY II**

4 credits.

Focuses on calf and heifer nutrition, regulation of dry matter intake, plant and forage chemistry, vitamins, lipids, and starch.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**DY SCI 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI 900 – SEMINAR**

1 credit.

Comprehensive reviews of research aimed at broadening understanding of dairy science.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI/AN SCI 931 – SEMINAR IN ANIMAL NUTRITION**

1 credit.

Discussion of literature that has a bearing on animal nutrition. Students are to survey the literature and present a seminar.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DY SCI/AN SCI/GENETICS 951 – SEMINAR IN ANIMAL BREEDING**

0-1 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**DY SCI 990 – RESEARCH**

1-12 credits.

Independent research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## DANCE (DANCE)

**DANCE 100 – UNDERSTANDING DANCE**

1 credit.

Builds understanding and appreciation for the field of Dance. Delves into dance and its' many facets, integrating, theoretical, historical, and embodied learning through viewing, reading, reflecting, discussing and finally, creating. Develops students into an informed audience and encourages relevance to other disciplines.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DANCE 101 – BALLROOM DANCE I**

1 credit.

Introduction to basic movement concepts and skills involved in ballroom dancing. Covers the fundamental skills in leading and following, rhythm, and style of the Waltz, Fox Trot, Jitterbug/Swing, Tango, and Cha-Cha. Ballroom dance as a social dance form requires that participants work in pairs, which will switch throughout the semester. Other social dances may be explored.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 102 – BALLROOM DANCE II**

1 credit.

Designed to improve and expand the ballroom dance skills. Explores Fox Trot, Swing/Jitterbug, Waltz, Cha-Cha, Tango, Rumba, Merengue, Polka, and other Latin dances, if time permits.

**Requisites:** DANCE 101**Repeatable for Credit:** No**Last Taught:** Spring 2019**DANCE 103 – MODERN JAZZ DANCE**

1 credit.

Introduction to Modern Jazz Dance with emphasis on practical application, including center work, traveling, and memorized movement sequences.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 105 – BALLET I**

1 credit.

Emphasizes the study and practice of the fundamental principles of Ballet technique and exploration of the body as a creative and expressive instrument. Movement based experiential learning.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 106 – BALLET II**

1 credit.

Emphasizes the study and practice of the fundamental principles of Ballet technique and exploration of the body as a creative and expressive instrument.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 107 – CONTEMPORARY DANCE I**

1 credit.

Emphasizes the study and practice of the Contemporary dance technique and exploration of the body as a creative and expressive instrument capable of gaining new understanding through the art of dance.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 108 – CONTEMPORARY DANCE II**

1 credit.

Emphasizes the study and practice of the Contemporary dance technique and exploration of the body as a creative and expressive instrument capable of gaining new understanding through the art of dance.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 110 – WORKSHOP IN DANCE ACTIVITY**

1-2 credits.

Explores the creative and expressive aspects of dance movement. Develops technical skills and creative ability through whole body work on flexibility, strength, alignment, endurance, movement and improvisation. Develops appreciation of dance as an art form.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 111 – CONTEMPORARY DANCE TECHNIQUE AND THEORY I**

1-3 credits.

Level I Core course in technique. Study and practice of the fundamental principles of contemporary dance technique and theory. Exploration of the body as a creative and expressive instrument. Audition at first class meeting determines course eligibility and placement.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE 112 – CONTEMPORARY DANCE TECHNIQUE AND THEORY II**

1-3 credits.

Level I Core course in technique. Study and practice of the fundamental principles of contemporary dance technique and theory. Exploration of the body as a creative and expressive instrument. Audition at first class meeting determines course eligibility and placement.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 115 – HIP-HOP DANCE TECHNIQUE AND THEORY I**

1-2 credits.

Provides an introduction to foundational movement technical knowledge necessary to perform Hip-Hop dance safely with form and skill. Introduces the theory, practice, aesthetics, and historical foundations of hip-hop dance. Hip-Hop dance is an artistic manifestation of Hip-Hop culture with dances and movement activities related to histories and philosophies as well as improvisatory states of expression. Engage with the history, theory and philosophy surrounding the dance vocabulary, which directly impacts the physical intelligence of the dancer. Explore the roots of funk and Hip-Hop dance in the social fabric of African, Caribbean, and Afro-Latin cultures while examining reinventions of ragtime, swing, and rock n' roll throughout the 20th and 21st centuries in America.

**Requisites:** None**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2022

**DANCE 116 – WORKSHOP IN WORLD DANCE**

2 credits.

Exploration in different traditional or folk dance forms from around the world.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**DANCE 118 – AFRICAN DANCE**

1 credit.

Technique and practice of several basic African dance forms with study of their musical, historical and cultural contexts.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE/ASIAN AM 121 – ASIAN AMERICAN MOVEMENT**

3 credits.

Techniques of exercises and movement forms derived from several Asian cultures as taught in the United States. Studied in the context of the construction and expression of ethnic and cultural identity.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 125 – BALLET TECHNIQUE I**

1-2 credits.

Introduction to basic skills and terminology; includes barrework, center work, petit allegro, grand allegro; focus on form, kinesthetic principles and aesthetic values.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE 126 – BALLET TECHNIQUE I-B**

1-2 credits.

Level I Core continued expanding terminology, further developing barre work, center work, petit allegro, grand allegro; focus on form, kinesthetic principles and aesthetic values.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 131 – SOMATIC THEORY AND PRACTICES**

2 credits.

Integration of body and mind is explored through various somatic practices.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 132 – WORKSHOP IN BODY STUDIES AND PRACTICES**

1 credit.

A laboratory in mind-body practice. Topics titles reflect the type of body practices or modalities covered. Each specific practice focuses on increased bodily awareness and function for the performing artist. Includes movement practices, readings, discussion, writing assignments, videos and performances/lectures.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**DANCE 133 – RELAXATION TECHNIQUES FOR EMBODIMENT AND STRESS MANAGEMENT**

1 credit.

Study and practice of neuro-muscular relaxation, self-regulation, focus/concentration, stress/anxiety management, and body awareness.

Exploration of the body as a creative tool to facilitate ease of movement and flexible approaches to stressors.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 135 – PILATES MAT I**

1 credit.

Pilates is a physical conditioning program that creates balance, improves posture, decompresses joints and creates elongated, toned muscles. The exercises focus on core strength, breath, and a flexible spine. Incorporates Level I-III Mat exercises. Explore functional anatomy and imagery-based alignment.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 136 – PILATES EQUIPMENT I**

2 credits.

Focuses on learning Level I II (Lab I) exercises on the Pilates equipment, which includes the Reformer, Cadillac, Low Chair, and High Barrel.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 140 – DANCE PRODUCTION**

2 credits.

Introduction to design and production for the performing arts with emphasis on dance. Covers the use of lighting, sound and other scenographic elements in theory and with practical experience.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 156 – MOVEMENT AS MATERIAL THROUGH IMPROVISATION**

2 credits.

Use of improvisation to develop a personal movement vocabulary and explore compositional form.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**DANCE 157 – INTRODUCTION TO MOVEMENT ANALYSIS**

2 credits.

An examination of the qualitative variations in movement processes as they relate to human function and expression.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 159 – COLLABORATIVE ARTS WORKSHOP**

2 credits.

Focuses on sharing ideas by creating dance and theatre through a collaborative process. Exposes a range of artistic disciplines with the focus of collaboratively developing a concert program projected through the lens of hip hop theatre. Engage in various art disciplines to develop interdisciplinary tools through a collaborative process that will strengthen and teach creative problem solving skills. By audition

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**DANCE 162 – FIRST YEAR WORKSHOP**

1 credit.

Introduction to the world of contemporary dance, and covers topics in contemporary dance performance and professionalism.

**Requisites:** Declared in Dance or Dance**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 165 – WORLD DANCE CULTURES: TRADITIONAL TO CONTEMPORARY**

3 credits.

A survey providing a framework for understanding and appreciating the significance of dance in and as human culture. Includes reading assignments, lecture, video and studio practice as opportunity to physically experience material discussed.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 168 – DANCING GENDER: EMBODIMENT, POLITICS AND FEMINIST THEORY**

3 credits.

Gender theories and feminist theories focus on the body as the main site where gender distinctions are understood. As the body holds a central position in the art of dance and the academic discipline of dance studies, explores gender and feminist theories through the lens of dance. Drawing on a wide array of examples and dance genres ranging from across the globe (such as Ballroom, Bollywood, Folk Dance, Ballet and more) introduces the cultural specificity of gender norms and the ways that dance has the potential to challenge heteronormativity through performance.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 200 – WRITING THE MOVING BODY**

3 credits.

Examines performance texts from the 20th century to the present, and applies them through written analyses.

**Requisites:** None**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 205 – DANCE**

1-4 credits.

Introduction to basic elements of modern, jazz and ballet dance forms; emphasis on dance in the physical education curriculum.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2017**DANCE 211 – CONTEMPORARY DANCE TECHNIQUE AND THEORY III**

1-3 credits.

Continuation of DANCE 111 and DANCE 112. Exploration of dance dynamics and quality through improvisation and the practice of set dance sequences.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE 212 – CONTEMPORARY DANCE TECHNIQUE AND THEORY IV**

1-3 credits.

Continuation of DANCE 211. Further development of skills. Development of dance phrases and movement vocabulary for invention.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**DANCE 213 – NEW MOVEMENT TECHNIQUES**

1-2 credits.

Exploration of new movement techniques in dance outside of traditional forms and methods.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE/THEATRE 218 – AFRICAN DANCE PERFORMANCE**

2 credits.

Technique, practice and performance of complex African and African-based dances in relation to polyrhythmic musical and percussive accompaniment. Study of historical and cultural contexts of these forms. Development of improvisational skills in dialogue with musicians.

**Requisites:** DANCE 118**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**DANCE 225 – BALLET TECHNIQUE II**

1-2 credits.

Emphasis on basic skills; barrework, center work, petit and grand allegro, adagio, and increased use of demi-pointe. Focus on form, kinesthetic principles and aesthetic values.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE 226 – BALLET TECHNIQUE II-B**

1-2 credits.

Level II Core continued expanding terminology, further developing barre work, center work, petit allegro, grand allegro; focus on form, kinesthetic principles and aesthetic values.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 231 – INTRODUCTION TO DANCE/MOVEMENT THERAPY**

2 credits.

Orientation to the scope of dance therapy as a profession. Historical framework, theoretical rationale, and present application of dance/movement therapy.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 232 – INTRODUCTION TO DYNAMICS OF DANCE THERAPY**

2 credits.

Fieldwork in community programs.

**Requisites:** DANCE 231**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 233 – DISARMING THE PLAYGROUND: VIOLENCE PREVENTION THROUGH MOVEMENT**

1 credit.

Study and Practice of using movement, body awareness, creativity and discussion to experience and develop skills to teach others embodied practices for handling stress, anxiety, conflicts, etc. in a peaceful, healthy way. Learn how to use tools to set healthy boundaries and deal with conflicts in the classroom or your life. Receive a thorough introduction to the Disarming the Playground Curriculum, a school violence prevention program rooted in the principles of dance/movement therapy. Learn to adjust activities and experiences for different age groups and different populations.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**DANCE 235 – PILATES MAT II**

1 credit.

Continuation of DANCE 135. Learn the intermediate to advanced level mat exercises, which continue to focus on core strength, breath and spinal flexibility while challenging upper body strength, range of motion in the hips and spine, spinal extension and inverted balance.

**Requisites:** DANCE 135**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 236 – PILATES EQUIPMENT II**

2 credits.

Covers the Intermediate to Advanced exercises (Level IV and V) on all equipment. The V exercises challenge a body's uniform development, range of motion in all actions of the spine, hips and shoulders, and require significant control and balance. These exercises are great cross-training for athletes, dancers or Pilates enthusiasts who wish to feel the advanced movement potential of their own bodies. Achieving mastery over these exercises requires more practice and commitment than the Beginner-Intermediate exercises as the body is expected to move beyond its average range of strength and flexibility.

**Requisites:** DANCE 136**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 237 – PILATES STUDIO I**

3 credits.

Experience in teaching Pilates, which includes private, semi-private, and small group sessions. Gives student-teachers class structure formats, including an understanding of the instructor to student relationship, pacing of class sessions, and the physical detail with which Pilates is taught.

**Requisites:** DANCE 236**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022

**DANCE 240 – DANCE PRODUCTION LABORATORY**

1 credit.

Provides hands-on experience working with the technical aspects of dance program performances.

**Requisites:** DANCE 140

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE 241 – MUSIC FUNDAMENTALS FOR DANCERS**

3 credits.

Study of the elements of music and their relationship to movement, a history of contemporary music and modern dance and an introduction to digital audio applications for choreography.

**Requisites:** MUSIC 111 or 151

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DANCE 255 – MOVEMENT COMPOSITION FOR THE PERFORMING AND VISUAL ARTS**

2 credits.

Basic principles of solo composition explored and applied to movement in visual and performing arts.

**Requisites:** DANCE 156

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE/THEATRE 259 – COLLABORATIVE ARTS PERFORMANCE LAB: DEVISING COLLABORATIVE PERFORMANCE THROUGH HIP HOP ARTS**

1-2 credits.

Work together to create a repertory company which produces performances of short hip hop theater and other collaborative performance art works for public viewing. Experimental works are researched and developed. Involves the development of collaborative and small group pieces as well as artistic training with a focus on individual and multi-voice work, theater improvisation, dance/movement.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE 265 – DANCE HISTORY I: WESTERN THEATRICAL DANCE FROM THE RENAISSANCE THROUGH THE 1920S**

3 credits.

An overview of the history of Western theatrical dance from the Renaissance to early twentieth century modernism with emphasis on the development of European and American ballet and early modern dance.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DANCE 268 – POLITICAL AND CULTURAL PERSPECTIVES IN DANCE STUDIES**

3 credits.

Examines the role of dance as a cultural form of expression within the political sphere. Draws on a variety of case studies ranging from popular dance TV shows, to European modern dance and from hip-hop to dancing at public protests and asks the question of what constitutes dance and what is its social and political function.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DANCE 311 – CONTEMPORARY DANCE TECHNIQUE AND THEORY V**

1-3 credits.

Level III. Contemporary dance technique and theory on the intermediate level. Emphasis on movement skills employing proper body alignment.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**DANCE 312 – CONTEMPORARY DANCE TECHNIQUE AND THEORY VI**

1-3 credits.

Continuation of DANCE 311.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE/AFROAMER/MUSIC 318 – CULTURAL CROSS CURRENTS: WEST AFRICAN DANCE/MUSIC IN THE AMERICAS**

3 credits.

The influence of traditional West African dance/music heritage in historical, artistic, social contexts in the development of new hybrid forms of music/dance created by cross-pollination of cultures of Africans, Europeans and indigenous peoples in the New World.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **DANCE/AFROAMER/ASIAN AM/FOLKLORE 319 – AFRO ASIAN IMPROV: FROM HIP HOP TO MARTIAL ARTS FUSION**

3 credits.

An Afro Asian perspective provides a lens through which intersections between Asian American and African American dance and martial arts are studied and practiced. Asian American and African American movement genres provide tools to explore dance fusion, choreography, and improvisation, to create dances informed by African American and Asian American legacies of struggle, innovation and transformation, while cognizant of historical forces of oppression and racism. Building connections through respectful communication with others are learned through dance practice, discussion and writing about concepts learned through readings, videos, and guest artist visits. Engagement with dance as a cultural vehicle for creative problem-solving and risk-taking occurs through guided class or smaller group activities.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **DANCE/FOLKLORE/THEATRE 321 – JAVANESE PERFORMANCE**

2 credits.

Technique and practice of classical Javanese dance in its musical, historical and cultural contexts.

**Requisites:** Junior standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **DANCE 325 – BALLET TECHNIQUE III**

1-2 credits.

Intermediate: barrework, center work, petit and grand allegro, adagio, demi-pointe, and more complex combinations and skills. Focus on form, kinesthetic principles, and aesthetic values.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **DANCE 326 – BALLET TECHNIQUE III-B**

1-2 credits.

Intermediate level continued: barrework, center work, petit and grand allegro, adagio, demi-pointe, and more complex combinations and skills. Focus on form, kinesthetic principles, and aesthetic values.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **DANCE 330 – FUNCTIONAL ANATOMY FOR MOVEMENT PRACTICES**

2 credits.

Provides an understanding of functional anatomy in kinetic terms, exploring efficient musculoskeletal function as it relates to pedestrian movement and vigorous movement. Learn how to see and feel the difference between healthy movement and movement pathology.

**Requisites:** DANCE 131, 135, or 136

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **DANCE 331 – DYNAMICS OF DANCE THERAPY**

3 credits.

Movement lab integrating theory and techniques of dance therapy. Field work in community service projects.

**Requisites:** DANCE 231

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **DANCE 337 – PILATES STUDIO II**

3 credits.

Cover the Pilates Level IV-V (Intermediate-Advanced) material on the equipment and continues work from DANCE 237.

**Requisites:** DANCE 235, 237, and 336

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

### **DANCE/ART 341 – SOUND DESIGN FOR THE PERFORMING AND VISUAL ARTS**

3 credits.

Production of audio soundtracks to complement the work of artists. The relationship of sound and music to dance, video, film, computer art, and other interdisciplinary forms.

**Requisites:** Declared in an Art, Dance, or Communication Arts program

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **DANCE 345 – VIDEO DESIGN FOR THE PERFORMING AND VISUAL ARTS**

3 credits.

Provides technical and aesthetic knowledge of the use of video camera and editing techniques; introduction to digital video; relationship of video to the performing and visual arts.

**Requisites:** DANCE 255 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**DANCE 355 – DANCE COMPOSITION II**

2 credits.

Composition and performance of dances based on pre-classic and modern dance forms to include practical application of theater production, costuming, and stage design.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DANCE 365 – DANCE HISTORY II: DIRECTIONS AND ISSUES OF CONTEMPORARY DANCE**

3 credits.

Surveys dance history from the 1960's to the present. Through research, video viewing, and discussions, grasp aesthetic ideas of modern dance; contextualize the major components of contemporary dance; and characterize trends and styles relative to underlying philosophies.

**Requisites:** DANCE 265**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 368 – DANCING CULTURES IN GREECE**

3 credits.

Examine the construction of Greek national identity and cultural heritage through dance, embodied practices, and art creation practices by utilizing dance studies frameworks and ethnographic research tools. Experiential multi-sited research to be completed in Greece, conducted through dance workshops, performances, museum visits, attendance to regional dance festivals, and in conversation with local experts featured as guest lecturers, such as dance historians, folklorists, choreographers, teachers, and performers. Genres covered include folk dance, social dance, concert dance, and other somatic practices that foster a sense of belonging, community, and unity amongst practitioners. Must have sophomore standing and a valid passport that does not expire 6 months past the Greece travel dates.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**DANCE 374 – TEACHING DANCE**

3 credits.

Provides methods and materials for appropriate dance instruction in the public and private sectors for an array of ages. Advocates for Dance Education in both public and private settings and emphasizes the value of Dance in enhancing the quality of life for all people.

**Requisites:** DANCE 131, 157, and 255 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**DANCE 375 – PILATES TEACHING METHODS**

1 credit.

Designed to provide an understanding of the practice of teaching and learning Pilates. Develops understanding of body mechanics as well as an appreciation of the variety of movement possibilities and compensatory patterns present in individual bodies. Consists of lecture, discussion, practice teaching and mentorship as students begin the process of teaching Pilates.

**Requisites:** DANCE 135**Repeatable for Credit:** No**Last Taught:** Spring 2023**DANCE 376 – PILATES TEACHING I**

2 credits.

Emphasizes private session teaching, applied anatomy and imagery, and overall Pilates pedagogy.

**Requisites:** Declared in Certificate in Pilates**Repeatable for Credit:** No**Last Taught:** Fall 2022**DANCE 399 – INDEPENDENT PROJECT**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE/FOLKLORE/THEATRE 421 – JAVANESE PERFORMANCE REPERTORY**

2 credits.

Introduction to Javanese theatre performance in a Javanese epic tradition. Includes use of Javanese gamelan music as accompaniment for dance drama.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**DANCE 431 – DANCE THERAPY PRACTICUM**

3 credits.

One semester supervised experience in psychiatric setting, i.e., special school, hospital, or community mental health center, and one semester of independent study.

**Requisites:** DANCE 331**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**DANCE/ART 441 – ADVANCED SOUND DESIGN**

3 credits.

Advanced instruction in the production of sound tracks to complement the work of artists in dance, video, film, computer art and other interdisciplinary forms.

**Requisites:** ART/DANCE/ART 341

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**DANCE 451 – DANCE REPERTORY THEATER**

1-3 credits.

Study of choreography created by member of the faculty and guest artists, leading to public performance. Must take a 100 level or higher dance technique or theory course concurrently. Must be cast in the Faculty Concert or Guest Artist work. Audition at first class meeting.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**DANCE 452 – DANCE REPERTORY THEATER**

1-3 credits.

Study of choreography created by member of the faculty and guest artists, leading to public performance. Must take a 100 level or higher dance technique or theory course concurrently. Must be cast in the Faculty Concert or Guest Artist work. Audition at first class meeting.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE 455 – DANCE COMPOSITION III**

2-3 credits.

Principles of organization in group composition. Planning, composing and presenting of group dances.

**Requisites:** DANCE 255, DANCE 355, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**DANCE 462 – SENIOR SEMINAR**

3 credits.

Reflect on the entirety of dance coursework, develop current work in performance and dance scholarship, and prepare for future engagement with the discipline outside the university.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**DANCE 463 – SENIOR PROJECT**

1-2 credits.

Focuses on artistic and scholarly senior dance projects such as choreography, performance, pedagogy, research studies, papers, and articles.

**Requisites:** Senior standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DANCE 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists present topics appropriate to their specializations.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**DANCE 476 – PILATES TEACHING II**

3 credits.

Complete a minimum of 3 hours of teaching per week (or equivalent) working with individuals one on one or with group classes. Teach Pilates coursework Level I-V. Attend weekly seminars and mentor meetings.

**Requisites:** Declared in Pilates Certificate, DANCE 337 and 376

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DANCE 560 – CURRENT TOPICS IN DANCE: WORKSHOP**

1-3 credits.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**DANCE 675 – DANCE AND COMMUNITY**

2-3 credits.

Engages with dance arts for and in communities. Working in relation to core ideas about the value of dance/movement in community, covers interdisciplinary research, scholarship, and praxis within this diverse area of work. Investigates how dance and interrelated arts serve as vehicles for social and environmental change in diverse communities. Specific themes might include racial justice, environmental justice, indigenous survival struggles, and how these themes impact or galvanize communities. Theory and practice reaches beyond campus and connects to the H'Doubler legacy as well as the Wisconsin idea.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions



**DANCE 699 – INDEPENDENT PROJECT**

0-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DANCE 999 – INDEPENDENT PROJECT**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 1991

## DERMATOLOGY (DERM)

**DERM 601 – SKIN BIOLOGY AND SKIN DISEASES**

3 credits.

Introduction to basic science principles of skin biology and skin diseases (biochemistry, molecular biology, genetics, etc.). Provides a strong base and training to future scientists, physicians, and industrial leaders in skin sciences and skin care, as well as drug and device development.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOLOGY/ZOOLOGY/BIOLOGY 101), (CHEM 104, CHEM 109 or BIOCHEM 501), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DERM 904 – SCIENCE OF CUTANEOUS DISEASE**

2 credits.

The practice of Dermatology encompasses diseases of the skin, mucosal surfaces, hair and nails. The scientific specialty integrates cellular and molecular biology, immunology, microbiology, and physiology to support patient care decisions. Learn basic science principles of normal and abnormal cutaneous functioning, building on the principles introduced in the MED SC-M 774. These core concepts will be applied through interactions with patients in the clinical setting, building foundational basic science knowledge to diagnose and treat dermatologic diseases.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**DERM 910 – INDEPENDENT READING AND RESEARCH IN DERMATOLOGY**

2-8 credits.

Independent research under the direct supervision of Dermatology faculty. Each student's research project is individualized to meet student research goals within the context of faculty research needs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DERM 919 – INDIVIDUALIZED CLINICAL ELECTIVE IN DERMATOLOGY**

2-4 credits.

Experience blends medical and procedural dermatology, dermatopathology and basic science topics. Advance patient care skills through exposure to a broad array of common and complex cutaneous diseases, formulation of basic differential diagnoses and treatment plans, and performance of common diagnostic procedures. Experience via rotations through general adult and pediatric dermatology clinics, as well as specialty clinics. Opportunities may arise for participation in inpatient dermatology consults. All clinical activities will be completed under the direct supervision of attending physicians and residents. Participate in additional educational activities, including faculty lectures, Grand Rounds conference, and reading or on-line assignments. Additional patient care related learning activities may be assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, attending physician, and clinical site.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DERM 953 – DERMATOLOGY ELECTIVE**

2-4 credits.

Experience blends medical and procedural dermatology, dermatopathology and basic science topics. Advance patient care skills through exposure to a broad array of common and complex cutaneous diseases, formulation of basic differential diagnoses and treatment plans, and performance of common diagnostic procedures. Experience via rotations through general adult and pediatric dermatology clinics, as well as specialty clinics. Opportunities may arise for participation in inpatient dermatology consults. All clinical activities will be completed under the direct supervision of attending physicians and residents. Participate in additional educational activities, including faculty lectures, Grand Rounds conference, and reading or on-line assignments. Additional patient care related learning activities may be assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, attending physician, and clinical site.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**DERM 954 – AMBULATORY DERMATOLOGY ELECTIVE**

2-4 credits.

Outpatient dermatology experience provides exposure to a typical private practice where patients present with a broad array of problems. Learn to diagnose, treat, and/or appropriately refer common dermatologic conditions and to be aware of cutaneous manifestations of serious and significant systemic disease.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**DERM 955 – PUBLIC HEALTH IN DERMATOLOGY SELECTIVE**

2 credits.

Explore the difficulties and opportunities available in improving public health in the specialized field of dermatology. Topics and readings have been developed with public health experts from around the country, and include discussions surrounding skin cancer screening and overdiagnosis, as well as dermatologic challenges in LGBTQ+, skin of color, rural, and inmate communities.

**Requisites:** MED SCI-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

## DESIGN STUDIES (DS)

**DS 101 – INTRODUCTION TO TEXTILE DESIGN**

3 credits.

This survey class will be an introduction to the technical and conceptual ways of working in Textile Design. Students will participate in three five week modules: one module introducing print and dye concerns, one module introducing off-loom processes, and one module introducing structural enrichment techniques and concepts. Each module will include a series of introductory exercises leading to a final larger project. The work in each module will be supported by short readings and slide lectures highlighting historical and contemporary work. Course fee: yes.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DS 120 – DESIGN: FUNDAMENTALS I**

3 credits.

Elements and principles of design. Lecture and studio experience relevant to design of the visual environment.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**DS 130 – INTRODUCTION TO INTERIOR ARCHITECTURE**

3 credits.

This course is an introduction to interior architecture, as a discipline and as a profession. We will examine the ways in which interior environments impact our lives, and the challenges and responsibilities faced by those who work in this field. Topics include: the history of interior design as a profession; the increased professionalization of interior design; the relation of interior design to other design disciplines (such as architecture and furniture design); the social, economic, and environmental issues that impact design; the role of emerging technologies (including digital media); design research and documentation; the elements and principles of design; the identification and observation of quality work in both commercial and residential settings; contemporary trends in taste and aesthetics; and the application of design research methods to a real-world project. This course will provide students with the foundation necessary to continue as interior architecture majors.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**DS 140 – VISUAL THINKING - FORM AND SPACE**

3 credits.

Manual and digital techniques for idea exploration, concept development, and design presentation using a variety of media. Coursework will include projects in hand drawing techniques and professional design software. Gain heightened attention to detail, form, light, shade, and shadow; learn to understand the relationship of two-dimensional drawings and three-dimensional objects; learn to explore multiple design solutions visually; convey technical information; and professionally communicate design concepts. All of this is done with the intention to introduce visual communication, visual thinking, visual inspiration and visual representation. Projects throughout the semester build on the concepts and skills introduced during lectures and demonstrations.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DS 150 – VISUAL THINKING - PIXELS AND PENCILS**

3 credits.

Explores visual media as a means of describing what exists, as a method for generating ideas for what could be, and for professionally communicating a design concept. Projects will utilize hand drawing techniques as well as professional design software. Supports the proficiency of technical skills while teaching essential methods for creative practice. Learn to move fluidly across platforms to visually explore possibilities, refine ideas, and professionally communicate design plans.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**DS 153 – SEWN CONSTRUCTION I**

3 credits.

Introduces the principles of sewn construction and addresses the physical and aesthetic properties of fiber and fabrics in the context of apparel design. The studios address skills necessary to plan and construct basic garments. Lectures, hands-on studios, and critiques explore the fundamentals of apparel structure and emphasize the interrelationship of fabric, design and apparel construction as well as the creative, expressive potential of materials and making.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 154 – SEWN CONSTRUCTION II**

3 credits.

Emphasizes specialty fabrics, finishes and complex construction such as matching plaids and working with pile fabrics. Introduces pattern manipulation through basic flat patternmaking principles. Design and fabricate an original collection of garments for a target customer and will develop and construct two of the garments.

**Requisites:** DS 153**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 210 – FASHION ILLUSTRATION**

3 credits.

Introduction to visual communication of apparel design concepts using selected media. Focus is on drawing the fashion figure, using special techniques, with emphasis on the relationship of figure, garment, fabric, texture, and pattern.

**Requisites:** DS 120 and DS 154**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 215 – PATTERNMAKING FOR ACCESSORIES**

3 credits.

The principles and theories of flat pattern, drafting and draping methods for 3D accessories are explored. The principles of patternmaking are applied to headwear, handbags and footwear. Students complete projects that require designing, patterning and constructing hats, bags and footwear.

**Requisites:** DS 153**Repeatable for Credit:** No**Last Taught:** Spring 2020**DS 220 – DESIGN: FUNDAMENTALS II**

3 credits.

Elements and principles of three-dimensional design. Lecture and studio experience relevant to design and analysis of the spatial environment.

**Requisites:** DS 120 and (M E 160 or ART 112)**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 221 – PERSON AND ENVIRONMENT INTERACTIONS**

3 credits.

Effects of building and outdoor spaces on people over the life course.

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 222 – INTERIOR DESIGN I**

4 credits.

Understanding and applying the process of solving design problems of interiors. Space planning; selection and use of furnishings and materials; preparation of presentations.

**Requisites:** DS 220 and declared in Interior Architecture program**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 223 – INTERIOR ARCHITECTURAL DESIGN**

3 credits.

Building components, construction, interpretation of working drawing, and the process of project development.

**Requisites:** DS 222**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 224 – INTERIOR MATERIALS AND FINISHES**

3 credits.

The materials used in interior environments are immense, diverse and constantly changing. This course will focus on the composition of materials, their uses, and how they affect human health and well being.

**Requisites:** Declared in Interior Architecture program**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 225 – APPAREL DESIGN I**

3 credits.

Basic principles and elements of design as they apply to apparel. Emphasizing both process and product, students analyze fashion trends and practical problems while developing and executing original designs.

**Requisites:** DS 210 and 253**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS/ART 226 – TEXTILE DESIGN: OFF-LOOM CONSTRUCTION**

3 credits.

Studio design problems in two and three dimensional off-loom constructions; off-loom weaving, looping, and knotting; historical reference and contemporary application.

**Requisites:** DS 120 and 153**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**DS 227 – TEXTILE DESIGN: PRINTING AND DYEING I**

3 credits.

Surface design developed in print and resist techniques using historic and contemporary methods.

**Requisites:** DS 101**Repeatable for Credit:** No**Last Taught:** Spring 2022**DS 228 – TEXTILE EMBELLISHMENT I**

3 credits.

Historic and contemporary design techniques for embellishing textiles; including embroidery, beadwork and appliqué.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS/ART 229 – TEXTILE DESIGN: WEAVING I**

3 credits.

The relationship of hand weaving to textural surfaces and sculptural forms are examined through the study of problems including structure, pattern, composition, and additional conceptual technical possibilities. Content is explored in the development of individual direction and in relationship to the discussion of historical and contemporary textiles and other works of art. Allows students to pursue an advanced investigation of concept and technique of hand-woven cloth.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 241 – VISUAL COMMUNICATION I**

3 credits.

The course focuses on the basic concepts, methods and materials used for communicating ideas during the design process. The course emphasizes creating visually driven experiences, with the goal of giving students the tools to integrate traditional manual approaches with up-to-the-minute digital approaches, all within the context of creative design thinking.

**Requisites:** Declared in Interior Architecture program**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 242 – VISUAL COMMUNICATION II**

3 credits.

Advanced topics focusing on the concepts, methods and materials used for communicating ideas during the design process. With an emphasis on creating visually driven experiences, the course integrates traditional manual approaches with up-to-the-minute digital approaches, all within the context of creative design thinking.

**Requisites:** DS 241**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 251 – TEXTILE SCIENCE**

3 credits.

Chemistry and physics of fibers and polymers. Principles of chemical finishes and dyeing. Qualitative fiber analysis. Structure and properties of yarns and fabrics.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 252 – DESIGN LEADERSHIP SYMPOSIUM**

1 credit.

Provides detailed examination of design careers in the fields of textiles, fashion, and apparel design as well as interior design, industrial design, and architecture. High level industry experts from leading companies in the design industry participate as guest speakers and panel members.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DS 253 – PATTERNMAKING FOR APPAREL DESIGN**

3 credits.

The theory and principles of pattern making through flat pattern and draping techniques.

**Requisites:** DS 154**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS/ANTHRO/ART HIST/HISTORY/LAND ARC 264 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**DS 270 – DESIGN AND FASHION EVENT PRACTICUM**

2 credits.

Addresses the multi-disciplinary production of a student-centered, student-driven design and fashion event. Topics include, creative direction, strategic marketing, stage and performance, visual communication, event organization, audience engagement and event production. Students in this class will gain knowledge, skills and hands-on experience implementing a large-scale art event. Emphasizes teamwork and fosters multi-disciplinary appreciation.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2020**DS 299 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DS 319 – CLOTH TO CLOTHING**

3 credits.

This studio class will explore specific dye and manipulation techniques that directly relate to integrated textile and garment design. Working with color, composition and fabric movement we will discuss simple garment shapes and how they can be used in conjunction with expressive textiles.

**Requisites:** DS 101 and DS 154**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 321 – PROBLEM-DEFINITION: DESIGN PROGRAMMING**

3 credits.

Programming is the problem definition phase of design process. An architectural or design program is used to guide the design process and to evaluate design solutions. A variety of design programming approaches, tools, and techniques are presented. Opportunity to develop skills in preparing a design program document that includes multiple user-needs and principles of environment-behavior interaction.

**Requisites:** DS 221 and sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 322 – INTERIOR DESIGN II**

4 credits.

Design of residential interiors including space planning, lighting design, selections of materials and furniture, professional communication of design solutions. Emphasis on the aesthetic and functional needs of the family and residents with special needs.

**Requisites:** DS 222**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 327 – TEXTILE DESIGN: MANUAL/COMPUTER GENERATED IMAGERY AND PATTERN**

3 credits.

Pattern design for textiles, wallpaper and other applications (motif, layout, repeats, colorways, coordinates), using various manual and digital creation methods. Development of imagery, design concepts, collaboration and presentation.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 341 – DESIGN THINKING FOR TRANSFORMATION**

3 credits.

Students will learn design thinking techniques to enhance creative analysis and problem solving. Students will directly apply what they have learned to a variety of human centered design challenges. Students will innovate, prototype, and test designs that address real-world problems with real-world constraints and the limitations of technology. Projects range from ways to improve everyday situations to community issues.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 355 – HISTORY OF FASHION, 1400-PRESENT**

3 credits.

Changing form and meaning of costume in the West from Renaissance to present. Dress considered in relation to social/cultural milieu and as an art form. Includes treatment of the body; ethnic/class variations; couture; "antifashion".

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**DS 361 – DESIGN-RELATED INTERNATIONAL EXPERIENCE**

1-6 credits.

In-depth study of art/design concepts and/or practice in a specific culture. Each class looks at cultural issues through a particularized design-related lens. Students live and work in the country they are studying.

**Requisites:** DS 120 or ART 104**Repeatable for Credit:** Yes, unlimited number of completions**DS/ART HIST 363 – AMERICAN DECORATIVE ARTS AND INTERIORS: 1620-1840**

3-4 credits.

Interdisciplinary study of the design, production, and consumption of household objects and their American domestic settings, 17th through the early 19th centuries.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016

**DS 401 – FIT ACCESSORIES DESIGN**

1-6 credits.

Provides equivalency for accessory design courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 402 – FIT ADVERTISING AND MARKETING COMMUNICATIONS**

1-6 credits.

Provides equivalency for advertising and marketing communications courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 403 – FIT COMMUNICATION DESIGN FOUNDATION**

1-6 credits.

Provides equivalency for communication design foundation courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 404 – FIT FASHION BUSINESS MANAGEMENT**

1-6 credits.

Provides equivalency for fashion business management courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 405 – FIT FASHION DESIGN**

1-6 credits.

Provides equivalency for fashion design courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 406 – FIT TEXTILE DESIGN AND SCIENCE**

1-6 credits.

Provides equivalency for textile design and science courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 407 – FIT RELATED AREA**

1-6 credits.

Provides equivalency for related area courses completed at the Fashion Institute of Technology (FIT) by Textiles Fashion Design majors as part of the FIT visiting student program. This is not a course that can be enrolled in at UW-Madison

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**DS 421 – HISTORY OF ARCHITECTURE AND INTERIORS I: ANTIQUITY THROUGH 18TH CENTURY**

3 credits.

This course surveys the history of architecture, interiors, furnishings and decorative arts from antiquity to the mid-19th century. Lectures and readings introduce major design cultures and movements, emphasizing the role of social, economic, political, technological, and aesthetic factors in the shaping design.

**Requisites:** DS 120 or (ART HIST 201 and ART HIST 202)**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 422 – HISTORY OF ARCHITECTURE & INTERIORS II: 19TH AND 20TH CENTURIES**

3 credits.

This course surveys the history of architecture, interiors, furnishings and decorative arts from the mid-19th to the mid-20th century. Lectures and readings introduce major design cultures and movements, emphasizing the role of social, economic, political, technological, and aesthetic factors in the shaping design.

**Requisites:** DS 421 or (ART HIST 201 and 202)**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 427 – TEXTILE DESIGN: PRINTING AND DYEING II**

3 credits.

Focuses on silkscreen printing. Discharge, burnout, and chemical resist processes, specific to screen printing, will be introduced. Students will be asked to develop conceptual ideas and explore alternative ways of producing images.

**Requisites:** DS 227 and 327**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**DS 428 – TEXTILE EMBELLISHMENT II**

3 credits.

Opportunity to continue creative research introduced in Textile Embellishment I, with a special emphasis on student driven design. Advance skill and vision using traditional and experimental ways of altering and enriching the surface of pliable materials using techniques such as stitching, embroidery, beading, and fabric collage. Identify and pursue individual conceptual concerns. Readings, formal and informal presentations, group and individual critiques will support the work. Presentation of research will include formal power point talks and physical presentation of the completed textile works.

**Requisites:** DS 228**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 429 – TEXTILE DESIGN: WEAVING II**

3 credits.

Analysis of complex or compound hand weave techniques. Individual development of solutions to problems of structural textile design.

**Requisites:** ART/DS/ART 229**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 430 – HISTORY OF TEXTILES**

3 credits.

Designs and meanings and interrelationships of textiles in selected cultures and time periods.

**Requisites:** None**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 451 – COLOR THEORY AND TECHNOLOGY**

3 credits.

Color technology and its impact on a variety of scientific and design oriented fields are discussed. Emphasis is placed on the spectrophotometric measurement of color and the use of computer technology to create, analyze and match color.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 501 – SPECIAL TOPICS**

1-3 credits.

Specialized subject matter of current interest to undergraduate students. Requisite varies by topic

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DS/COMP SCI/ISYE 518 – WEARABLE TECHNOLOGY**

3 credits.

Gives students hands-on experience in building wearable computing platforms. Designed for students who have a background in textiles and apparel design, computer science, engineering or media arts. By the completion of the course students will have fundamental knowledge of electronic circuitry, programming, and "maker skills".

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 519 – COLLECTION DEVELOPMENT**

3 credits.

An opportunity for advanced students in Design and Art to demonstrate accumulated learning through a semester long project in the development of a collection of marketable artisan works within their own media. Combines classroom-based learning explorations with real world technical and economic considerations to successfully navigate a balance between expansive thinking and application in real world situations.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**DS 527 – GLOBAL ARTISANS**

3 credits.

In the field of design, there has been an increased emphasis on ethical practices in production and consumption. Utilizing "design thinking", students in this project-based survey course will be exposed to important issues surrounding small-scale artisan production and develop valuable hands-on skills working with artisan partners through design, quality control, branding and story- telling. Topics may include: fair trade development, product design, cultural implications, as well as pricing, marketing, and sales.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DS 528 – EXPERIMENTAL TEXTILE DESIGN**

2-3 credits.

Experimental design and decorative principles; elements and techniques for the animation of textile surfaces.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022



**DS 529 – BUILDING A SUSTAINABLE CREATIVE PRACTICE**

3 credits.

Artists and designers' material choices influence the content, social meaning, and physical structure of their work, as well as leaving an environmental foot print and affecting social exchange. Beginning with the consideration of reuse and recycling, students in this studio class will critically engage ideas of sustainability in art making and design practice with an emphasis on fiber related topics including textile and apparel design, soft sculpture, papermaking and book arts, as well as exhibition, installation, and/or the distribution of finished works.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 549 – ENVIRONMENTAL CONTROL SYSTEMS: LIGHTING, ACOUSTICS, AND THERMAL COMFORT IN BUILDINGS**

3 credits.

The ways in which we design, construct, and operate has significant impacts on the building occupants and the environment. Architects, designers, and building engineers can work closely together to reduce depletion of critical resources, prevent environmental degradation, and create built environments that are livable, comfortable, safe, and productive. Offers the foundational knowledge on which such practice can be built on. Through a series of lectures, field measurements, and building simulations, understand how lighting, acoustics, and thermal properties behave in buildings and influence the building occupants. The proper application of building design as well as methods for designing and evaluating these features are discussed.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and declared in Interior Architecture; or graduate/professional standing**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 561 – TEXTILES: SPECIFICATIONS AND END USE ANALYSIS**

3 credits.

Physical textile testings are studied. Emphasis is placed on the evaluation of textiles intended for use as apparel and for interiors. Writing specifications, and minimum performance standards are also discussed.

**Requisites:** DS 224 or DS 251**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 570 – DESIGN AND FASHION EVENT MANAGEMENT**

3 credits.

Production of a student-driven, student-centered design and fashion event presents the framework for advanced experience and study for upper-level students. This course provides the opportunity to study and to actively engage in high-level interdisciplinary exploration and collaboration. Transferring discipline-specific skills to a new context, students will learn methods for testing, review, and revision to develop problem-solving skills and communication. The course encourages teamwork as well as crossdisciplinary understanding and appreciation.

**Requisites:** DS 270**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**DS/COMP SCI 579 – VIRTUAL REALITY**

3 credits.

Introduces students to the field of virtual reality and focuses on creating immersive, interactive virtual experiences. Survey topics include historical perspectives on virtual reality technology, computer graphics and 3D modeling, human perception and psychology, human computer interaction and user interface design. This course is designed for students with backgrounds in Computer Science, Engineering, Art, Architecture and Design. Students will work in interdisciplinary teams on projects, culminating in a final event that will be showcased to the public. While not an official uisite, the class will be technologically motivated; therefore students should be comfortable learning new software. The class will utilize publicly available game design software which provides tools and services for the creation of interactive content. While not necessary, students may find it helpful to have taken classes in programming and computer graphics (such as COMP SCI 559: Computer Graphics) or in 3D modeling (such as ART 429: 3D Digital Studio I or DS 242: Visual Communication II).

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 601 – INTERNSHIP**

1-8 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in design studies related fields. Course intended for juniors and seniors in Design Studies.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**DS 620 – VISUAL THINKING FOR PROBLEM SOLVING**

3 credits.

Visual thinking's theoretical foundations are paired with visual thinking skills, tools, and applications. The format explores the way these can be combined while thinking critically and engaging with problem solving methodologies such as design thinking. Theoretical foundations include the elements and principles of design, the processes of visual narrative, and perceptual theories. Skills and applications include manual sketching, 3D visualization and modeling, data visualization, image manipulation, graphic design, video presentation, multimedia, design for 3D printing and fabrication, diagramming, digital rendering, and graphic design.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**DS 622 – INTERIOR DESIGN III**

4 credits.

Design of commercial interiors with emphasis on design process, programming, space planning, selection of interior materials, furniture, and lighting. Field trip required.

**Requisites:** DS 322**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 623 – INTERIOR DESIGN IV**

4 credits.

Design of commercial interiors with emphasis on acoustics, codes, costs, specifications, details, and visual presentation. Field trip required.

**Requisites:** DS 622**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 624 – INTERIOR ARCHITECTURE PROFESSIONAL PRACTICE**

3 credits.

Prepares Interior Architecture majors to launch their careers in design. Become acquainted with aspects of the interior design profession: how an office works, the project delivery process in interior design practice, and post-graduation material preparation.

**Requisites:** DS 322**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 626 – INTERIOR DESIGN V**

4 credits.

Provides the opportunity to explore and refine interior design skills while responding to current events and the ever changing world around us. Follow the design process from research, programming, conceptual and schematic design, full design development and presentation. All aspects of designing an interiors project in detail will be addressed, including space planning, interior architectural articulation, furniture selection, finish selection, detailing of custom elements, rendering, website development for client presentation, and more.

**Requisites:** DS 623**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS/LAND ARC 639 – CULTURE AND BUILT ENVIRONMENT**

3 credits.

The course explores cultural values embedded in buildings through understanding physical configurations, social organizations, practiced/ symbolic/representational aspects of buildings. The course covers a wide range of cultures and the built environments they produce including examples from the Americas, the Middle East, as well as those of the many ethnic minorities in the U.S.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 641 – ADVANCED DESIGN THINKING FOR TRANSFORMATION**

3 credits.

An empathetic, human-centered perspective that uses Design Thinking and draws from historical precedence and current research from a variety of fields to help solve complex and persistent problems such as student mental health awareness and lack of clean drinking water. Utilizes advanced design thinking techniques to enhance creative analysis and problem solving to address real-world problems with real-world constraints and the limitations of technology. Projects range from ways to improve everyday situations to community issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**DS 642 – TASTE**

3 credits.

Exploration of the idea of taste - both "good" and "bad", in "popular" and "high" culture. Cross-cultural readings from theoretical and historical perspectives, relating to architecture, landscape, public space, art, and clothing.

**Requisites:** Graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Fall 2020

**DS 679 – RESEARCH METHODS IN DESIGN**

3 credits.

Future designers need to have critical research knowledge and skillsets that include mastery of various research methods, related issues, and practical experiences in understanding and interpreting quantitative or qualitative research. Design research allows designers to be involved directly with objects, products, and environments they design through human-centered inquiry. The major concepts addressed include design research and its influence on the practice of design, generating research questions, critical literature review, research evaluation, data management and analysis, and various research strategies, all geared toward application to various design practices.

**Requisites:** Senior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**DS 680 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for seniors completing theses for Human Ecology honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**DS 690 – SENIOR THESIS**

2-4 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DS 699 – INDEPENDENT STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**DS/ANTHRO/ART HIST/HISTORY/LAND ARC 764 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**DS 920 – SEMINAR IN DESIGN STUDIES**

1-3 credits.

This course is intended as forum for Design Studies graduate students to discuss issues in contemporary art and design.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**DS/F&W ECOL/URB R PL 955 – PRACTICAL RESEARCH DESIGN AND METHODS OF EMPIRICAL INQUIRY**

3 credits.

Provides a practical introduction to basic concepts of research question formulation, research designs and alternative methods of inquiry, implications for internal validity of the research and generalizability of the findings, operational definitions and measurement validity, reliability, utility and precision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**DS 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**DS 999 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## ECONOMICS (ECON)

**ECON 100 – ECONOMIC APPROACH TO CURRENT ISSUES**

3-4 credits.

Emphasizes current economic issues and illustrates how the economist's perspective helps understand them. Academic readings and popular books such as Freakonomics will be used to indicate the breadth and scope of questions that can be analyzed from an economic perspective.

**Requisites:** MATH 96 or placement into MATH 112 or satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ECON 101, 102, or 111

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON 101 – PRINCIPLES OF MICROECONOMICS**

4 credits.

Economic problems of individuals, firms and industries with emphasis on value, price, and distribution of income.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for ECON 111

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 102 – PRINCIPLES OF MACROECONOMICS**

3-4 credits.

Macroeconomic measurement and models of aggregate demand and supply; fiscal and monetary policy for unemployment, inflation, and growth.

**Requisites:** ECON 101 or A A E 215. Not open to students with credit for ECON 111

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 109 – STUDY ABROAD IN INTRODUCTORY ECONOMICS**

1-4 credits.

Provides an equivalency for introductory level economics courses taken on UW-Madison study abroad programs.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ECON 111 – PRINCIPLES OF ECONOMICS-ACCELERATED TREATMENT**

4 credits.

Integrated treatment of macroeconomics and microeconomics (see ECON 101 and ECON 102). Accelerated approach to economics training, especially for Economics: Math Emphasis majors.

**Requisites:** MATH 112 or 113 or placement into MATH 221. Not open to students with credit for ECON 101 or 102

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 205 – QUANTITATIVE TOOLS FOR ECONOMICS**

3-4 credits.

The objective of this course is to refine the quantitative skills necessary to succeed in intermediate- and advanced-level economics courses. The principle focus will be on applying the skills acquired in your math courses to the questions, models, and optimization problems that are common in economics. Topics include specific economic applications of algebra, financial mathematics, and calculus.

**Requisites:** (ECON 101, 102, 111 or concurrent enrollment) and (MATH 211, 217, 221 or 275)

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 228 – INTERNSHIP ECONOMICS**

1 credit.

Internship in economics related field. Students must be declared in the Economics major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**ECON 299 – DIRECTED STUDY**

1-3 credits.

Study of topics at elementary undergraduate level as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2014

**ECON/FINANCE 300 – INTRODUCTION TO FINANCE**

3 credits.

Concepts and techniques in corporate finance and investments. Topics include the financial environment, securities markets, financial markets, financial statements and analysis, working capital management, capital budgeting, cost of capital, dividend policy, asset valuation, investments, decision making under uncertainty, mergers, options, and futures.

**Requisites:** (ECON 101, 111 or A A E 215) and (ACCT I S 100 or 300 or concurrent enroll in ACCT I S 100) and (GEN BUS 306, ECON 310, MATH/STAT/MATH 309, 431, STAT 224, 301, 302, 311, 324, 371 or PSYCH 210 or concurrent) or declared in undergrad Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 301 – INTERMEDIATE MICROECONOMIC THEORY**

4 credits.

Contemporary theory of consumption, production, pricing and resource allocation.

**Requisites:** [(MATH 217 or 221) and (ECON 101, 111, or AAE 215)] or (MATH 211, ECON 101 and 102) or (MATH 211, AAE 215 and ECON 102). Not open to students with credit for ECON 311.

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 302 – INTERMEDIATE MACROECONOMIC THEORY**

4 credits.

Principles and theories of national income determination, analysis of savings, consumption, investment and other aggregates in the national and international economy and relation to employment, inflation and stabilization.

**Requisites:** MATH 211, 217, 221, or 275 and (ECON 101 and 102) or (A A E 215 and ECON 102) or ECON 111. Not open to students with credit for ECON 312

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/HIST SCI 305 – DEVELOPMENT OF ECONOMIC THOUGHT**

3-4 credits.

Development of economic thought from the middle ages to the present; emphasis on major schools of thought including Classical, Marxian, Neo-Classical, and Keynesian schools.

**Requisites:** (ECON 101 and 102) or (A A E 215 and ECON 102) or ECON 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON/A A E/REAL EST/URB R PL 306 – THE REAL ESTATE PROCESS**

3 credits.

Introductory overview focused on the key aspects of the real estate process: developing real estate, permitting real estate, buying and selling real estate, understanding the economics of real estate, financing real estate, valuing real estate, leasing real estate, and managing real estate.

**Requisites:** (ECON 101, 111, or A A E 215) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 309 – STUDY ABROAD IN INTERMEDIATE ECONOMICS**

1-4 credits.

Provides an equivalency for intermediate level economics courses taken on UW-Madison study abroad programs.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ECON 310 – STATISTICS: MEASUREMENT IN ECONOMICS**

4 credits.

Introduction to analysis of economic data. The techniques of descriptive statistics and statistical inference (hypothesis testing and estimation) as directed toward application in economic research.

**Requisites:** ECON 101, 102, or 111 and MATH 211, 217, 221, or 275

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 311 – INTERMEDIATE MICROECONOMIC THEORY - ADVANCED TREATMENT**

3 credits.

A mathematical approach to the theory of consumption, production, pricing and resource allocation.

**Requisites:** (MATH 222 or 276) and (ECON 101 and 102) or ECON 111. Not open to students who have credit for ECON 301

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 312 – INTERMEDIATE MACROECONOMIC THEORY - ADVANCED TREATMENT**

3 credits.

A mathematical approach to the principles and theories of national income determination, analysis of savings, consumption, investment and other aggregates in the national and international economy and relation to employment, inflation, and stabilization.

**Requisites:** (MATH 222 or 276) and (ECON 101 and 102) or ECON 111. Not open to students who have credit for ECON 302

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 315 – DATA VISUALIZATION FOR ECONOMISTS**

3-4 credits.

Introduction to the fundamental concepts of economic data visualization and analysis. Develop a toolkit of skills to visualize, interpret, and communicate data. After examining the fundamentals of data visualization, emphasis is on methods using Tableau to design and develop dashboards, graphs, and charts to ease quick and accurate interpretation of economic relationships. Move beyond tabular results to display and demonstrate the findings of economic research.

**Requisites:** (ECON 101 or 111) and ECON 310

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/FINANCE 320 – INVESTMENT THEORY**

3 credits.

Structure and functioning of securities markets; principles of portfolio construction; models of the tradeoff between risk and expected return.

**Requisites:** ECON/FINANCE/ECON 300, (MATH 213, 222, or 276) and (GEN BUS 307, 656, ACT SCI 654, 655, ECON 400, 410, MATH/STAT/ MATH 310, STAT 312, or 333 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 321 – SPORTS ECONOMICS**

3-4 credits.

An examination of the economics behind major professional and intercollegiate sports teams and franchises. Topics covered include the organization of leagues, competitive balance, cooperative and collusive behavior, measurement of productivity, the market for franchises, sale and resale of tickets, and public financing of facilities.

**Requisites:** ECON 101, 111, or A A E 215

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ECON 330 – MONEY AND BANKING**

4 credits.

Monetary economics; the role of money in the determination of output, prices and interest rates; commercial and central banking, monetary policy, the international monetary system.

**Requisites:** (ECON 101 and 102) or ECON 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/A A E/ENVIR ST 343 – ENVIRONMENTAL ECONOMICS**

3-4 credits.

Microeconomic principles underlying the use of natural resources such as air, water, forests, fisheries, minerals and energy. These principles are applied in the examination of pollution control, preservation vs. development, deforestation, and other environmental issues.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 355 – THE ECONOMICS OF GROWING-UP AND GETTING OLD**

3-4 credits.

What does economics have to say about how or why people decide to go to school, get married (or divorced), or have children? Use economic models to investigate these "every day occurrences." Start with early childhood and trace out the life cycle from schooling to retirement, concentrating on six stages of life: early childhood; schooling; adolescence; marriage and divorce; fertility; and retirement decisions.

**Requisites:** ECON 310

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019



**ECON 364 – SURVEY OF INTERNATIONAL ECONOMICS**

3-4 credits.

Contemporary theory of international trade and finance applied to current economic events.

**Requisites:** ECON 101. Not open to students with credit for ECON 301, 311, or 464

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ECON 370 – ECONOMICS OF POVERTY AND INEQUALITY**

3 credits.

Analysis of patterns and causes of poverty and inequality. Topics include theoretical approaches, measurement, historical perspectives and policy responses.

**Requisites:** (ECON 101, 102, and 310) or (ECON 111 and 310)

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ECON/A A E 371 – ENERGY, RESOURCES AND ECONOMICS**

3 credits.

Use microeconomic theory to analyze energy markets. Discuss the economics of oil, gas, and electricity and learn about applications to contemporary issues and policy questions.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON 390 – CONTEMPORARY ECONOMIC ISSUES**

3 credits.

Topics vary, including current developments in all fields of economics.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 400 – INTRODUCTION TO APPLIED ECONOMETRICS**

4 credits.

An introduction to applied econometrics – the statistical methods economists use to evaluate empirical relationships and test economic theory. Emphasis on application of econometrics to real world data using modern statistical software and developing skills needed to understand empirical work in economics.

**Requisites:** ECON 310, (STAT 240 and 340), 302, 303, 311, 324, MATH/STAT/MATH 309, or 431. Not open to students with credit for ECON 410.

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 409 – STUDY ABROAD IN ADVANCED ECONOMICS**

1-4 credits.

Provides an equivalency for advanced level economics courses taken on UW-Madison study abroad programs for which there is no exact UW-Madison equivalent. Course must be of equal rigor to those offered on campus. To receive this equivalent, departmental pre-approval is required.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ECON 410 – INTRODUCTORY ECONOMETRICS**

4 credits.

Statistical methods used in applied economic research. Topics include: survey methods and data sources; multiple regression and analysis of variance; econometric estimation; forecasting and policy applications.

**Requisites:** ECON 310 and (MATH 217, 221, 275). Not open to students with credit for ECON 400

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/REAL EST/URB R PL 420 – URBAN AND REGIONAL ECONOMICS**

3 credits.

Focuses on the study of the allocation of scarce resources across space. Uses economic methods to analyze urban real estate. Topics covered include the determinants of real estate values, the location decisions of households and firms, land use, urban growth and agglomeration, real estate pricing, cycles, development, housing market and policies, and sustainable development.

**Requisites:** (ECON 101 or 111) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/A A E 421 – ECONOMIC DECISION ANALYSIS**

4 credits.

Managerial oriented, applied presentation of microeconomic theory. Quantitative emphasis with extensive homework use of spreadsheets and written executive summaries of applied economic analyses. Applications on natural resources and agricultural markets.

**Requisites:** STAT 301, 371, ECON 310, CE SOC/SOC/C&E SOC 360, PSYCH 210, or (GEN BUS 306 and 307)

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 435 – THE FINANCIAL SYSTEM**

3 credits.

Banking, credit markets and financial institutions, monetary and debt management policies; relation of national monetary and credit institutions to the international system.

**Requisites:** (ECON 301 or ECON 311) and (ECON 302 or ECON 312) and ECON 330

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON 441 – ANALYTICAL PUBLIC FINANCE**

3–4 credits.

Analyzes the problems of the public sector in dealing with domestic issues of education, urban areas, welfare, natural resources, and the environment; provides students with opportunity to apply the tools of economic analysis that are pertinent to domestic public sector problems.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 442 – MACROECONOMIC POLICY**

3–4 credits.

Addresses current issues in modern macroeconomic policymaking. Topics include: fiscal and monetary policy, financial and sovereign debt crisis, and financial regulation.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), and ECON 310; or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ECON 448 – HUMAN RESOURCES AND ECONOMIC GROWTH**

3–4 credits.

Theoretical and empirical analysis of public and private investment in people, emphasizing the contribution to productivity of education, training, health, and mobility.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/ENVIR ST/POLI SCI/URB R PL 449 – GOVERNMENT AND NATURAL RESOURCES**

3–4 credits.

Problems of public policy and administration for development and use of natural resources.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**ECON 450 – WAGES AND THE LABOR MARKET**

3–4 credits.

Economic and institutional forces which determine labor supply and demand; wage theories, wages in the economy, the labor force, unemployment, wages, labor mobility, functioning of labor markets.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 451 – THE ECONOMIC APPROACH TO HUMAN BEHAVIOR**

3 credits.

The economic analysis of "non-economic" topics such as the family, crime, politics and religion.

**Requisites:** ECON 301 or 311

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ECON 455 – BEHAVIORAL ECONOMICS**

3–4 credits.

Empirical evidence documenting departures in human decision making from rational norms, and alternative theoretical approaches to explaining this behavior grounded based upon psychological enrichments of standard rational actor model. Topics include paradox of choice, loss aversion, time inconsistent preferences, and social preferences.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ECON 458 – INDUSTRIAL STRUCTURE AND COMPETITIVE STRATEGY**

3 credits.

Analysis of competition among firms and its effect on industrial structure. Theoretical models and case studies are used. Topics include: entry barriers, price competition dynamics, entry and exit strategies, and competitive tactics such as product differentiation, advertising, and technological change.

**Requisites:** ECON 301 or 311

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ECON 460 – ECONOMIC FORECASTING**

3-4 credits.

Introduction to econometric time series analysis, forecasting methods, and forecast evaluation. Covers theoretical, methodological, and applied topics, and much of the work will be hands-on data analysis.

**Requisites:** ECON 400, 410, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **ECON 461 – INTERNATIONAL MACROECONOMICS**

3-4 credits.

International macroeconomics, focusing on the international exchange of financial instruments - currencies, bonds, equities, derivatives, and more - and how decisions and policies made in one country spill over into other markets.

**Requisites:** ECON 302 or 312

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ECON/A A E/INTL BUS 462 – LATIN AMERICAN ECONOMIC DEVELOPMENT**

3 credits.

A historico-institutional analysis of development problems in the principal Latin American countries, with attention to differentiation of national growth patterns and alternative development strategies.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ECON 464 – INTERNATIONAL TRADE**

3-4 credits.

Contemporary theory of International Trade, focusing on why nations trade and what do they trade, and in what sense international trade is beneficial to trading countries. Current policy issues will be examined to demonstrate the usefulness as well as the limitations of the theory.

**Requisites:** ECON 301 or 311. Not open to students with credit for ECON 364.

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ECON 465 – THE AMERICAN ECONOMY TO 1865**

3-4 credits.

Survey of the forces underlying American economic development and the distribution of income; rise of regional economies; origins of manufacturing; effects of slavery; influence of government and politics on growth.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **ECON/HISTORY 466 – THE AMERICAN ECONOMY SINCE 1865**

3-4 credits.

Emergence of the large corporation; growth and instability since the mid-nineteenth century; increasing government participation in the economy; the impact of war, depression, discrimination, and international responsibilities.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **ECON 467 – INTERNATIONAL INDUSTRIAL ORGANIZATIONS**

3-4 credits.

Focuses on the behavior of international firms and the public policies that affect them. Study theoretical models of strategic competition, evaluate the effects of government policies, review aggregate empirical evidence and learn from case studies.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 468 – INDUSTRIAL ORGANIZATION AND IMPERFECT COMPETITION**

3–4 credits.

An overview of the theory of industrial organization, including the study of oligopolistic behavior, monopolistic competition, product differentiation and the dynamic behavior of competitive industries under uncertainty.

**Requisites:** (ECON 301 or 311) and (MATH 217, 221, or 275)

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON/A A E 473 – ECONOMIC GROWTH AND DEVELOPMENT IN SOUTHEAST ASIA**

3 credits.

Evaluates economic development strategies in Southeast Asia and their implications for growth, distribution and environment. Students learn trade and development theory as well as specific knowledge of Southeast Asian economic development.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON/A A E 474 – ECONOMIC PROBLEMS OF DEVELOPING AREAS**

3 credits.

Analyzes aggregate growth, income distribution and poverty in lower income economies. Uses microeconomics of imperfect labor, capital and insurance markets to explore why some individuals advance economically as their economies grow and others fall behind. Considers implications of aggregate and micro analysis for national and international economic policy.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 475 – ECONOMICS OF GROWTH**

3–4 credits.

Theoretical analysis of issues in growth and development. Models will be motivated by country experiences. Topics include: factors affecting saving, investment and cross-country differentials on per capita income; the role of government institutions, market regulation, technology and trade.

**Requisites:** (ECON 301 or ECON 311), (ECON 302 or ECON 312) and (MATH 217, 221, 275); or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/A A E 477 – AGRICULTURAL AND ECONOMIC DEVELOPMENT IN AFRICA**

3 credits.

Composition, organization, and techniques of agricultural production; economic change and development of agriculture, economic policies, special problems of developing African agriculture.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/FINANCE 503 – MARKETS WITH FRICTIONS**

3 credits.

Search theory provides framework for understanding markets; is used to study questions in monetary, public, financial economics. This course will develop theoretical tools used to introduce frictions in formal models; will address the role of frictions in several applied scenarios.

**Requisites:** (FINANCE 305, ECON 301, 302, 311, or 312) and (MATH 213, 222, or 276); or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ECON 521 – GAME THEORY AND ECONOMIC ANALYSIS**

3–4 credits.

The study of multi-agent, interactive decision problems, with emphasis on questions of coordination, cooperation and conflict. Applications include relations between countries, competition between firms, bargaining between unions and firms, and contests between political candidates.

**Requisites:** (ECON 301 or 311) and (MATH 222 or 276); or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 522 – LAW AND ECONOMICS**

3–4 credits.

Economic analysis of legal rules and institutions with emphases on how different areas of law influence individual incentives. Specific topics include: (1) property, (2) contracts, (3) torts, (4) legal procedure and (5) criminal law.

**Requisites:** ECON 301 or 311

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/PHILOS 524 – PHILOSOPHY AND ECONOMICS**

3 credits.

Economics examined from the viewpoint of the philosophy of science. Normative and positive aspects of economic theory. Deterministic and statistical explanation. Arrow impossibility theorem. Radical economics.

**Requisites:** Sophomore standing and 3 credits of PHILOS or ECON

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON/A A E 526 – QUANTITATIVE METHODS IN AGRICULTURAL AND APPLIED ECONOMICS**

4 credits.

Use of quantitative methods (mathematics, statistics, and optimization) to analyze problems faced by decision makers in natural resources and agriculture. Extensive homework requiring use of quantitative methods via spreadsheet tools to solve problems from an applied decision context.

**Requisites:** (MATH 211 or 221), ECON 301, and STAT 301, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON/R M I 530 – INSURING LIFE'S RISKS: HEALTH, AGING, AND POLICY**

3 credits.

Covers risks related to health and aging, rationales for social insurance programs to protect against these risks, and costs and benefits of these programs. Broad topics include health insurance, disability insurance, and Social Security and pension policy.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON/A A E/F&W ECOL 531 – NATURAL RESOURCE ECONOMICS**

3 credits.

Economic concepts and tools relating to management and use of natural resources, including pricing principles, cost-benefit analysis, equity, externalities, economic rent, renewable and nonrenewable resources, and resource policy issues.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON/POP HLTH/PUB AFFR 548 – THE ECONOMICS OF HEALTH CARE**

3-4 credits.

Analysis of the health care industry. Markets for hospitals and physicians' care, markets for health manpower, and the role of health insurance.

**Requisites:** ECON 301, ECON 311, or PUB AFFR 880

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 570 – FUNDAMENTALS OF DATA ANALYTICS FOR ECONOMISTS**

3-4 credits.

Introduction to the data that underlies quantitative economic analysis.

Learn how to formulate a research question, access economic data sources, conduct preliminary and formal analysis, and report findings in a professional manner.

**Requisites:** [ECON 310, (STAT 240 and 340), or (STAT 303 and 333)], and (ECON 301 or 311)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 580 – HONORS TUTORIAL IN RESEARCH PROJECT DESIGN**

3 credits.

Students will be required to criticize research by others, to draft a research proposal and to complete a project that requires original research.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), and ECON 410

**Course Designation:** Gen Ed – Communication Part B

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 581 – HONORS THESIS**

3 credits.

Students will work on their honor thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ECON 621 – MARKETS AND MODELS**

3-4 credits.

An investigation into the various ways that markets determine the allocation of scarce resources: via a single market-clearing price, waiting in line or other forms of rationing, search, a centralized matching algorithm, an auction, or a contest. We will examine real-world examples of each type of market, and introduce and solve a formal theoretical model of each to see what insights it leads to.

**Requisites:** (ECON 301 or 311) and (MATH 217, 221, or 275), or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ECON 623 – POPULATION ECONOMICS**

3-4 credits.

Examination of economic determinants of population change and demographic behavior including household formation, marriage, child bearing and rearing, mortality (especially infant) and key forms of human capital investments including schooling and migration.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ECON/REAL EST/URB R PL 641 – HOUSING ECONOMICS AND POLICY**

3 credits.

The economic principles underlying the dynamics of the housing market; filtering, neighborhood decline and abandonment gentrification, tenure choice, mortgage choice, prepayment, mobility, mortgage default, submarket identification, racial discrimination and segregation. Examination of governmental programs affecting the housing market and their objectives and impacts; public and subsidized housing, zoning and land use regulation, rent and price controls, property and income tax policy.

**Requisites:** ECON/REAL EST/URB R PL/ECON/REAL EST 420 or concurrent enrollment

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ECON 661 – ISSUES IN INTERNATIONAL MACROECONOMICS**

3-4 credits.

Examines the macroeconomics of open economies (countries that can trade goods and assets with other countries). Takes a systematic approach to building and examining macroeconomic models of the open economy, to try to understand the determination of output and employment, trade balance, capital flows, the foreign currency exchange rate, international prices, and the role of uncertainty and asset choice.

**Requisites:** (ECON 302 or 312), ECON 310, and (MATH 217 or 221), or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ECON/SOC 663 – POPULATION AND SOCIETY**

3 credits.

Social and economic determinants and consequences of contemporary and historical population trends in both developed and developing societies. Fertility, mortality, migration, population distribution, age structure, population growth.

**Requisites:** SOC 170, SOC/CE 357, SOC/POP HLTH 380, ECON 101, 111, or A A E 215; or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ECON 664 – ISSUES IN INTERNATIONAL TRADE**

3-4 credits.

Covers advanced topics in international trade and investment, including foreign direct investment, dynamic models of trade, and models of firm-level heterogeneity.

**Requisites:** ECON 464, 310, and (MATH 217 or 221); or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ECON 666 – ISSUES IN INTERNATIONAL FINANCE**

3-4 credits.

Modern institutions, history, and controversies of international financial relations. Foreign exchange market, the Euro-currency banking system, and central bank intervention in both.

**Requisites:** (ECON 301 or 311), (ECON 302 or 312), (ECON 310, STAT 302, or 311), and (MATH 221 or 275); or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019



**ECON/A A E/ENVIR ST/URB R PL 671 – ENERGY ECONOMICS**

3 credits.

The method, application, and limitations of traditional economic approaches to the study of energy problems. Topics include microeconomic foundations of energy demand and supply; optimal pricing and allocation of energy resources; energy market structure, conduct, and performance; macro linkages of energy and the economy; and the economics of regulatory and other public policy approaches to the social control of energy.

**Requisites:** Graduate/professional standing or (senior standing and A A E 215, ECON 101, or 111)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ECON 681 – SENIOR HONORS THESIS**

3 credits.

Faculty guided honors level original research.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 682 – SENIOR HONORS THESIS**

3 credits.

Faculty guided honors level original research.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 690 – TOPICS IN ECONOMICS**

2-4 credits.

Topics in economic theory and policy.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 691 – SENIOR THESIS**

1-3 credits.

Faculty guided original research.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 692 – SENIOR THESIS**

1-3 credits.

Faculty guided original research.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 695 – TOPICS IN ECONOMIC DATA ANALYSIS**

3-4 credits.

Various advanced topics on the use of data to answer important economic questions.

**Requisites:** ECON 310, (STAT 240 and 340), or (STAT 303 and 333)

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 698 – DIRECTED STUDY**

1-4 credits.

Study of topics or research at an advanced undergraduate as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ECON 699 – DIRECTED STUDY**

1-4 credits.

Study of topics or research at an advanced undergraduate as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 700 – MATHEMATICS FOR ECONOMISTS**

3 credits.

Mathematical techniques used in economics analysis at a Master level.

Topics include: proof techniques, optimization, introductory topology, functional analysis, linear algebra for microeconomists and differential equations. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ECON 701 – MICROECONOMICS I**

3 credits.

First course in a two-semester sequence covering: consumer theory, producer theory, and markets under partial and general equilibrium, and with externalities or market power. The sequence will include an introduction to decision theory and game theory, and applications to auction theory and partially informed trade. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 702 – MACROECONOMICS I**

3 credits.

A mathematical approach to the study of aggregate output determination, including analysis of consumption, labor markets, economic growth, and business cycles. Analysis of fiscal and monetary policies and their interactions. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 703 – MATHEMATICAL ECONOMICS I**

3-4 credits.

A survey of mathematical techniques used in economic analysis. Linear algebra and optimization techniques are emphasized.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 704 – ECONOMETRICS I**

3 credits.

Econometric methods, theory, and applications. Matrix algebra will be used. Topics include linear regression, least-squares estimation, inference, and hypothesis testing. Primarily for Master's level students. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 705 – ECONOMETRICS II**

3 credits.

Econometric methods, theory, and applications. Topics include instrumental variables, GMM, panel data, limited dependent variables, time series, and vector autoregressions.

**Requisites:** ECON 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 706 – ECONOMETRICS III**

3 credits.

Focus on using econometric methods to address empirical questions, conduct empirical research, and write empirical papers in economics.

**Requisites:** ECON 705**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 708 – MICROECONOMICS II**

3 credits.

Second course in a two-semester sequence covering: consumer theory, producer theory, and markets under partial and general equilibrium, and with externalities or market power. The sequence will include an introduction to decision theory and game theory, and applications to auction theory and partially informed trade.

**Requisites:** ECON 701**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 709 – ECONOMIC STATISTICS AND ECONOMETRICS I**

3-4 credits.

Probability distributions, statistical inference; multiple linear regression; introduction to econometric methods. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 710 – ECONOMIC STATISTICS AND ECONOMETRICS II**

3-4 credits.

Extensions of the linear regression model; introduction to multiple equation models.

**Requisites:** ECON 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ECON 711 – ECONOMIC THEORY-MICROECONOMICS SEQUENCE**

3 credits.

First course in a two-semester sequence: theories of firms, consumers, and markets; or partial and general equilibria in market and centralized economies; topics in welfare economics. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 712 – ECONOMIC THEORY-MACROECONOMICS SEQUENCE**

3 credits.

First course in a two semester sequence: commodity, money and labor markets, their components and general equilibrium; intertemporal optimization and growth theory. It is expected that students will have completed three semesters calculus (such as MATH 234) and linear algebra (such as MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 713 – ECONOMIC THEORY: MICROECONOMICS SEQUENCE**

3 credits.

Second course in a two-semester sequence: the theory of market, their efficiency properties, externalities, and the role of prices, and an introduction to the economics of information, including moral hazard and adverse selection.

**Requisites:** ECON 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 714 – ECONOMIC THEORY; MACROECONOMICS SEQUENCE**

3 credits.

Second course in a two-semester sequence. Topics include: asset pricing; fiscal and monetary policy; mechanism design, estimation and calibration of business cycle models.

**Requisites:** ECON 712**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 715 – ECONOMETRIC METHODS**

3 credits.

Nonlinear econometric theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 716 – ECONOMETRIC METHODS**

3 credits.

Advanced econometric theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 717 – APPLIED ECONOMETRICS**

3 credits.

Applied cross section and panel methods.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 718 – TOPICS IN APPLIED ECONOMETRICS**

3 credits.

Applied time series methods.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**ECON 719 – ECONOMIC STATISTICS AND ECONOMETRICS III**

3-4 credits.

Advanced applied econometrics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**ECON 721 – FINANCIAL MICROECONOMICS**

3 credits.

The contemporary theory of financial markets, portfolio choice, and asset pricing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 724 – FINANCIAL ECONOMETRICS**

3 credits.

Introduction to econometric analysis of financial time series. Covers linear econometric time series models, multivariate time series, volatility estimation, and estimating and testing financial econometric models.

**Requisites:** ECON 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ECON 725 – MACHINE LEARNING FOR ECONOMISTS**

3 credits.

Introduction to the use of Machine Learning (ML) in economic analysis. Covers basic techniques of ML, much attention will be devoted to evaluating the use of these tools in economics. Learn how economists are integrating the tools of ML with econometric techniques in current empirical research. Gain hands on experience in using these techniques to answer traditional questions of interest to economists. Topics include (i) an in-depth discussion of the differences and similarities in goals, empirical settings and tools between ML and econometrics, (ii) supervised learning methods for regression and classification, unsupervised learning methods, large data analysis and data mining, (iii) recent methods at the intersection of ML and econometrics, designed for causal inference, optimal policy estimation, estimation of counterfactual effects. The methods are taught with an emphasis on practical application.

**Requisites:** Declared in an Economics graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 730 – INTERNATIONAL FINANCIAL ECONOMICS**

3 credits.

Examines the economics of international financial markets, and how international considerations affect financial economic models. It provides an introduction to foreign exchange markets and risk; it investigates international parity conditions and foreign exchange rate determination; it studies international capital markets; it looks at the basics of international corporate finance; and, it discusses foreign currency derivatives.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ECON/PUB AFFR/URB R PL 734 – REGIONAL ECONOMIC PROBLEM ANALYSIS**

3 credits.

Examination of major theories of regional economic development, with special emphasis upon the evolution and amelioration of regional economic problems. Selected techniques of regional analysis, including economic base multipliers, input/output models, and shift-share analysis are used in the context of setting regional development goals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ECON 735 – MONETARY AND FINANCIAL THEORY**

3 credits.

Advanced appraisal of theory and institutions of the financial system, monetary theory, the credit system and financial intermediaries.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ECON 736 – MACROECONOMIC POLICY**

3 credits.

Theoretical, empirical, and institutional aspects of the use of monetary, fiscal, and income policies to affect inflation, unemployment, and other policy goals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 741 – THEORY OF PUBLIC FINANCE AND FISCAL POLICY**

3 credits.

Theoretical development of the functions of government in a mixed economy; welfare criteria for efficient government expenditures and taxation; nature of public goods and of redistribution activities of governments. Program budgeting and theoretical issues in cost-benefit analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 742 – THEORY OF PUBLIC FINANCE AND FISCAL POLICY**

3 credits.

Incidence of tax burdens and expenditure benefits on relative incomes; effect of taxation on microeconomic decisions relating to work effort, investment, and consumption; analysis of the stabilization, growth, and debt management policies in the context of the economy as a whole; problems in international taxation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON/A A E 747 – FRONTIERS IN AGRICULTURAL ECONOMICS 2**

3 credits.

Organization, design, and performance of food and agricultural markets. Industrial organization; firm boundaries, contracting, and collective action; spatial, temporal, and quality dimensions of market design.

**Requisites:** ECON 709 and 711**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021

**ECON 750 – LABOR ECONOMICS**

3 credits.

Theoretical and empirical analysis of labor markets, labor mobility, the determination of earnings and employment, and labor supply of the household unit; emphasizes recent research on current issues in public policy.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 751 – SURVEY OF INSTITUTIONAL ASPECTS OF LABOR ECONOMICS**

3 credits.

Taught on a modular basis: Labor Theories and Labor History; Union Political Activities; Collective Bargaining and Public Policy. For use in analysis of problems in areas of labor markets, wages and human resources.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 761 – INDUSTRIAL ORGANIZATION THEORY**

3 credits.

A review of theories of the firm, oligopoly, and imperfect competition. Includes applications of economic theory and game theory to agency theory, product diversity, technological change, and strategic behavior by firms--among other problems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 762 – EMPIRICAL ANALYSIS OF INDUSTRIAL ORGANIZATION AND PUBLIC POLICY**

3 credits.

A study of measurement in industrial organization and a survey of empirical tests of hypotheses in the field. The theory and practice of antitrust is also covered. Each student will produce an original piece of research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 770 – DATA ANALYTICS FOR ECONOMISTS**

3 credits.

Use core economic datasets such as the Panel Study on Income Dynamics, Consumer Expenditure Survey, National Income and Product Accounts, and the American Community Survey for quantitative economic research. Learn to clean and manipulate data to create datasets usable for economic research and to implement theory-based and atheoretic econometric models.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON/GEN BUS/STAT 775 – INTRODUCTION TO BAYESIAN DECISION AND CONTROL I**

3 credits.

Common sampling models in business and economic problems, information from data, likelihood function of parameters, choices of models, Bayes' Theorem, subjective basis for probability, sequential nature of Bayesian inference, prior and posterior distributions of parameters in binomial, poisson, exponential and normal populations, comparison of two normal distributions, predictive distributions, decision theory, utility, risk aversion, extensive form of analysis, two-action problems, point estimation, best population problems, economics of sampling.

**Requisites:** STAT 609 or MATH/STAT/MATH 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 805 – ADVANCED MICROECONOMIC THEORY I**

3 credits.

Economic behavior under uncertainty; measure of risk, information structure, stock market and asset pricing, insurance theory, asymmetric information and incentive mechanisms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 806 – ADVANCED MICROECONOMIC THEORY II**

3 credits.

General equilibrium analysis existence and computation of fixed points and competitive equilibrium, regular economics, core, non-competitive approach to perfect competition and monopolistic competition.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019

**ECON 809 – TOPICS IN MICROECONOMIC THEORY**

1-3 credits.

Topics in microeconomic theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON 810 – ADVANCED MACROECONOMIC THEORY**

3 credits.

Topics in macroeconomic research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON/URB R PL 845 – ADVANCED TOPICS IN PUBLIC FINANCE**

1-4 credits.

Advanced public finance problems and literature, research; subject changes each semester; may be repeated. Modules.

**Requisites:** ECON 713 and 714**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**ECON/POP HLTH 848 – HEALTH ECONOMICS**

1-3 credits.

Health economics issues including demand, supply and pricing, market structure, medical malpractice, technological change, value of life, role of insurance, and other aspects of uncertainty.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 871 – ADVANCED INTERNATIONAL ECONOMICS**

3 credits.

General equilibrium algebraic and geometric modeling of open economies with balanced trade, and the welfare economics of international exchange and barriers thereto.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ECON 872 – ADVANCED INTERNATIONAL ECONOMICS**

3 credits.

Algebraic and geometric modeling of open macroeconomics with unbalanced trade and payments, focussing analytically on the foreign exchange market and the determinants of the exchange rate.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ECON 873 – SEMINAR-INTERNATIONAL ECONOMICS**

2-3 credits.

Individual research and group discussion of selected topics in the theory of international trade.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**ECON 899 – RECENT ADVANCES IN ECONOMICS**

1-3 credits.

Selections from all fields of economic research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON 901 – WORKSHOP IN MATHEMATICAL ECONOMIC THEORY**

1-7 credits.

First in a two seminar sequence on critical discussion of topics in the field of economic theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ECON 902 – WORKSHOP IN ECONOMIC THEORY**

1-7 credits.

Critical discussion of topics in the field of economic theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**ECON 903 – WORKSHOP ON INDUSTRIAL ORGANIZATION**

1-7 credits.

Current research on the operation of markets in which individuals and firms act with imperfect information, are limited in their responses, may purchase heterogeneous commodities or factor services, and are concerned with conflicting goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 904 – WORKSHOP ON INDUSTRIAL ORGANIZATION**

1-7 credits.

Second in a two seminar sequence on current research on the operation of markets in which individuals and firms act with imperfect information, are limited in their responses, may purchase heterogeneous commodities or factor services, and are concerned with conflicting goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 913 – WORKSHOP IN ECONOMETRICS**

1-7 credits.

Current research in econometric model building, estimation and inference in econometrics

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 914 – WORKSHOP IN ECONOMETRICS**

1-7 credits.

Second in a two seminar sequence on current research in econometric model building, estimation and inference in econometrics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON/ANTHRO/C&E SOC/SOC 925 – SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS**

2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 955 – WORKSHOP IN LABOR ECONOMICS**

1-7 credits.

Analysis of current research in wage determination and the functioning of labor markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 956 – WORKSHOP IN LABOR ECONOMICS**

1-7 credits.

Second in a two seminar sequence on the analysis of current research in wage determination and the functioning of labor markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON/LAW 961 – SELECTED PROBLEMS IN TRADE REGULATION-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**ECON 965 – WORKSHOP ON QUANTITATIVE MACRO-ECONOMIC ANALYSIS**

1-7 credits.

Current research on macroeconomic models, monetary theory and policy, the theory of portfolio selection, and the allocative and distributive performance of capital markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ECON 966 – WORKSHOP ON QUANTITATIVE MACRO-ECONOMIC ANALYSIS**

1-7 credits.

Second in a two seminar sequence on current research on macroeconomic models, monetary theory and policy, the theory of portfolio selection, and the allocative and distributive performance of capital markets.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ECON 968 – WORKSHOP ON PUBLIC ECONOMICS**

1-7 credits.

Individual research and group discussion of public expenditure programs with attention to investment in human capital, education, training, health information, and welfare programs. Reports on research in progress by students, staff, visiting scholars.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ECON 969 – WORKSHOP ON PUBLIC ECONOMICS**

1-7 credits.

Second in a two seminar sequence on individual research and group discussion of public expenditure programs with attention to investment in human capital, education, training, health information, and welfare programs. Reports on research in progress by students, staff, visiting scholars.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON 977 – WORKSHOP IN INTERNATIONAL ECONOMICS**

1-7 credits.

Current research in international trade; a wide range of topics in theory, quantitative analysis, statistics, and policy. For graduate students in their second or later years when working on theses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ECON 978 – WORKSHOP IN INTERNATIONAL ECONOMICS**

1-7 credits.

Second in a two seminar sequence on the current research in international trade; a wide range of topics in theory, quantitative analysis, statistics, and policy. For graduate students in their second or later years when working on theses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON/AFRICAN/ANTHRO/GEORG/HISTORY/POLI SCI 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ECON 990 – THESIS**

2-9 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ECON 999 – INDEPENDENT WORK**

2-9 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## EDUCATIONAL LEADERSHIP AND POLICY ANALYSIS (ELPA)

**ELPA/COUN PSY 350 – PEER LEADERSHIP AND MENTORSHIP WITH TRANSITIONING STUDENTS**

1 credit.

Examines student development in the first college year and strategies upper class students can utilize to be effective leaders and mentors of new students.

**Requisites:** Sophomore standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**ELPA 502 – WORKSHOP IN EDUCATIONAL LEADERSHIP AND POLICY ANALYSIS**

1-3 credits.

Practical problems derived from student interests and needs.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ELPA/ED POL 542 – LAW AND PUBLIC EDUCATION**

3 credits.

Examines the legal issues related to the policy decisions and delivery of public education (elementary and secondary) in the United States. Learn how law impacts both curriculum development and curricular delivery, explore current legal controversies, constitutional issues, and learn about legal reasoning and analysis. Examines how both legislation and litigation affects public education. Particular attention is paid to law as public policy and the analysis of the same.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA 600 – COOPERATIVE PROGRAM OFF-CAMPUS TERM**

0 credits.

For participants in M.S. cooperative program to maintain UW-Madison status during terms when taking courses from partner institution.

**Requisites:** Declared in Educational Leadership and Policy Analysis: Cooperative Program with UW Whitewater MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ELPA 640 – LEGAL RIGHTS AND RESPONSIBILITIES FOR TEACHERS**

1-3 credits.

Examines the legal issues confronting the classroom teacher on a daily basis. An emphasis will be placed on understanding legal analysis in order to empower teachers to better balance the multiple interests confronting them. Also, understanding of how law can further the development of a democratic classroom. Specific topics to be examined include: curricular control, teachers' academic freedom, religion in the curriculum, equity in programming, special education, student records, student discipline, teacher contracts, teacher discipline, and negligence.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 700 – FIELD EXPERIENCE IN EDUCATIONAL LEADERSHIP**

3 credits.

Supervised field experience: elementary, secondary, vocational, technical, higher, and/or special education at local, state, or national level.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ELPA 701 – INTRODUCTION TO HIGHER AND POST-SECONDARY EDUCATION**

3 credits.

Examines the history and philosophy of higher and postsecondary education; the major participants; curriculum; governance and leadership; relations with state and federal government; and current issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA 702 – INTRODUCTION TO EDUCATIONAL LEADERSHIP**

3 credits.

Integration of research, theory, and standards of practice for effective leadership in contemporary educational organizations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**ELPA 703 – EVALUATING AND SUPPORTING QUALITY CLASSROOM TEACHING**

3 credits.

Evaluate teaching practices and recognize and support quality classroom teaching in K-12 settings. Application of established evaluation frameworks to video cases of classroom practice.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 710 – INTRODUCTION TO INTERCOLLEGIATE ATHLETICS ADMINISTRATION**

3 credits.

Examine the administration of intercollegiate athletics in higher education institutions with particular emphasis on providing practical and theoretical approaches.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ELPA 715 – GOVERNANCE AND ADMINISTRATION OF COLLEGES AND UNIVERSITIES**

3 credits.

Functions, organization, and administrative practices of colleges and universities; role of governing boards, administrators, faculty members, and students in policy making.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**ELPA/COUN PSY/CURRIC/ED POL/ED PSYCH/RP & SE 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 725 – RESEARCH METHODS AND PROCEDURES IN EDUCATIONAL ADMINISTRATION**

3 credits.

Role of theory and hypothesis testing in research. Introduction to research problems, questions, hypotheses, variables, constructs, definitions, measurement, research and experimental designs, sampling, descriptive statistics, proposal writing, types of research and statistical computing. Critical analysis of published research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 726 – DATA-BASED DECISION-MAKING FOR EDUCATIONAL LEADERSHIP**

3 credits.

Engages educational leaders in data-driven decision making from a system-wide perspective, and developing basic data analysis skills.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ELPA 735 – LEADERSHIP FOR EQUITY AND DIVERSITY**

3 credits.

Coordinating and effective utilization of school-based special services in the context of student diversity with attention to values, theory, and research underlying curriculum, instruction and policy, in terms of social class, gender, sexual orientation, disability, and race.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ELPA 736 – ADMINISTRATION OF STUDENT SERVICES IN HIGHER EDUCATION**

3 credits.

Organization and administration of student services in higher education including philosophy, current issues, student development, program planning, financial aid, auxiliary services, housing, counseling, advising, social and health services, student organizations, legal aspects, and special populations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA/CURRIC 746 – THE ADULT LEARNER: IMPLICATIONS FOR CURRICULUM AND INSTRUCTION**

3 credits.

Analysis of the principles and instructional models applicable to the instruction of adults. Attention to the integration of research on learning and teaching in informal and formal educational settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ELPA 750 – COACHING ATHLETICS 1: EVERYDAY PRACTICES OF TOP LEADERS**

3 credits.

Employs an everyday practices conceptual framework. Core tenets: brokering, embedding, experimenting, targeting high doses, zeal. Examines complexities of coaching practice, including individual, organizational, and contextual variables. Draws from research on leadership. Uses research-driven framework to analyze coaching practice across five domains. Highlights processes that guide successful coaches at multiple levels. Encourages reflection upon coaching aspirations and trajectories.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 751 – LEADERSHIP AND JUSTICE IN SPORTS**

3 credits.

Examines the broad landscape of athletics, focusing on matters of human, social, economic, and cultural capital. Draws from prominent books, articles, documentaries, and other sources to develop expanded perspectives and nuanced understandings of leadership and social justice in sports. Specific learning foci include the social, cultural, and historical roles of sports and the traditional and emerging roles of athletes and coaches. Particular attention paid to matters of race, poverty, activism, youth sports, college sports reform, and the leadership that unfolds in these settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 752 – COACH AS TEACHER: MASTERING INSTRUCTIONAL PRACTICE ON AND OFF THE FIELD**

3 credits.

Provides opportunities to learn about the theory and practice of instruction in athletics settings. Identifies the hallmarks of excellent teaching and learning. Synthesizes the characteristics and practices of teachers who achieve mastery. Considers how particular contexts (e.g., sport, developmental stage, physical environment) shape teaching and learning. Explores team curriculum. Examines methods of leading and evaluating teaching and learning in sport. Also addresses: practice planning, skills-teaching, feedback, technology, learning targets, on-field instruction, and film room instruction.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 753 – PSYCHOLOGY AND COACHING IN SPORTS**

3 credits.

Examines key principles of psychology relating to athletics. Addresses psychological aspects of leading. Examines research on psychology in competition. Considers how attention to psychology improves processes and outcomes. Supports coaches' and leaders' holistic development.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 754 – RUNNING A CHAMPIONSHIP SYSTEM: THE BADGER SPORTS LEADERSHIP ROAD COURSE**

3 credits.

Examines core components of championships sports programs. Uses case study design to examine how leadership unfolds across multiple levels within one setting. Draws from distributed leadership analytic framework. Considers how matters such as talent, culture, commitment, leadership, intelligence, organization, resilience, teamwork, integrity, health, resources, and opportunities intersect in a successful system.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Fall 2022**ELPA 755 – COACHING ATHLETICS 2: A BELL COW WAY**

3 credits.

Provides opportunities to learn from specific models of coaching practice. Utilizes Bell Cow method. Articulates processes underlying successful coaching systems. Attends to personal characteristics and unique settings of coaching. Draws from leadership theory.

**Requisites:** ELPA 750**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ELPA/ED POL/PUB AFFR 765 – ISSUES IN EDUCATIONAL POLICY ANALYSIS**

3 credits.

Theory, research, and practical experience in educational policy analysis, including the social construction of policy problems in education; the design, implementation, and evaluation of policy responses; and the practical and ethical dilemmas of the policy analyst.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA/INTER-HE 770 – COMMUNITY, OPPORTUNITY, AND JUSTICE**

3 credits.

Critical examination of school-community engagement and collaboration. Examines theory and practice of mutually beneficial collaboration in diverse education settings, including leadership issues in collaborative settings, and facilitators and inhibitors to effective collaboration.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 777 – HIGHER AND POST-SECONDARY EDUCATION CAPSTONE SEMINAR**

3 credits.

Provides an opportunity to use concepts and theories learned in previous coursework to analyze professional issues facing higher education administrators. Assists with career transitions and provides a culminating experience for the master's program.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ELPA/ED PSYCH 780 – TEACHER LEADERSHIP AND LEARNING COMMUNITIES**

3-4 credits.

Focuses on knowledge and skills teachers need to be leaders in their schools in facilitating the development of strong learning communities that include students, teachers, families, administrators, and other educators. Understand key concepts, theories, and models used in building and sustaining effective learning communities; develop skills in creating practices that contribute to effective teacher leadership; and identify and strengthen skills needed to lead schools to build learning communities that promote student learning.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020



**ELPA/COUN PSY/CURRIC/ED POL/ED PSYCH/RP & SE 788  
– QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD  
METHODS I**

3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA/COUN PSY/CURRIC/ED POL/ED PSYCH/RP & SE 789  
– QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD  
METHODS II**

3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 810 – DOCTORAL INQUIRY IN EDUCATIONAL LEADERSHIP  
AND POLICY ANALYSIS**

3 credits.

Introduction to inquiry in the field of educational leadership and policy analysis for first semester doctoral students. Provides an introduction to research through engagement with ideas, including identifying and crystallizing meaningful problems, fundamentals of research design, and key challenges in conducting disciplined inquiry.

**Requisites:** Declared in Educational Leadership and Policy Analysis PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 815 – PROBLEMS IN COLLEGE AND UNIVERSITY  
ADMINISTRATION**

3 credits.

Theory and research applied to the study of policy issues and problems in college and university administration.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**ELPA/ED PSYCH 822 – INTRODUCTION TO QUANTITATIVE  
INQUIRY IN EDUCATION**

3 credits.

Utilize the concepts and methods of quantitative social science research to conduct research on education issues. Topics include hypothesis testing, statistical inference, point estimates, graphic and numerical data displays, correlation and regression.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 823 – DATA MANAGEMENT FOR EDUCATION POLICY  
ANALYSIS**

3 credits.

Focuses on the knowledge and skills required to support rigorous quantitative inquiry. Acquire and import data; combine (merge/append) multiple data sets; organize directories and files for optimal workflow; clean data; document data manipulations for reproducibility and transparency; write code to facilitate collaboration; and summarize data in visual (graph, chart, map) and tabular forms.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 824 – FIELD RESEARCH DESIGNS & METHODOLOGIES IN  
EDUCATIONAL ADMINISTRATION**

3 credits.

Focuses on research design, the major qualitative methods and techniques used in field research, data analysis, communicating field research, ethical challenges, and trustworthiness in conducting qualitative research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 825 – ADVANCED RESEARCH METHODS IN EDUCATIONAL  
ADMINISTRATION**

3 credits.

Research designs for problems in educational administration including role of theory and hypothesis testing; variable definition and measurement; correlational, survey, experimental and non-experimental, factorial and single-subject designs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **ELPA/ED PSYCH 827 – SURVEYS AND OTHER QUANTITATIVE DATA COLLECTION STRATEGIES**

3 credits.

Methods and concepts of survey research methods as they are commonly used in education research. Strategies include surveys (phone, mail, electronic, in person), logs/diaries, and experience sampling instruments. Emphasis is given to self-administered surveys, including periodic surveys, since these strategies are the most common in education research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ELPA/ED POL/PUB AFFR 830 – SCHOOL FINANCE AND RESOURCE ALLOCATION**

3 credits.

Contemporary bases for collecting and distributing local, state, and federal funds for elementary and secondary education; problems and issues in financial support of education; current, alternative and more effective uses of educational resources.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **ELPA 831 – FINANCING POSTSECONDARY EDUCATION**

3 credits.

Contemporary bases for collecting and distributing funds for postsecondary education provided by two-year institutions, colleges and universities; problems and issues in financing postsecondary institutions; economic aspects of expenditures for postsecondary education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ELPA 832 – RESOURCE ALLOCATION FOR EQUITY AND SOCIAL JUSTICE**

3 credits.

School finance and resource allocation for educational leaders, with an emphasis on educational adequacy, equity and efficiency. Includes an emphasis on the strategic deployment of human and material resources to address inequality and promote educational opportunity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **ELPA/RP & SE 835 – LEADERSHIP FOR INCLUSIVE SCHOOLING**

3 credits.

Examines historical and organizational context of special education administration at the federal, state and local levels. Includes policy implementation, constituency management, coordination, communication, and current issues.

**Requisites:** ELPA 735

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ELPA 840 – PUBLIC SCHOOL LAW**

3 credits.

Legal aspects of public K-12 education. Legal structure; employee rights; employee discipline; curriculum; students' rights; student discipline, special education; torts; contracts, religion. Impact of federal and state constitutions, statutes, and court decisions on education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ELPA 841 – LEGAL ASPECTS OF HIGHER EDUCATION**

3 credits.

Legal structure of higher education, including historical evolution as well as current legal problems. Attempts to assess the impact of legal decisions, statutes, and regulations upon higher education and to discuss the implications of the interaction of the legal system and university governance for the practicing administrator.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ELPA/ED POL/ED PSYCH/RP & SE 842 – LEGAL FOUNDATIONS OF SPECIAL EDUCATION AND PUPIL SERVICES**

3 credits.

Legal requirements and issues relative to special education and pupil services programs; special education, juvenile justice, programs for English language learners, programs for children who are homeless; examination of applicable federal and state statutes and case law.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 844 – TECHNOLOGY AND SCHOOL LEADERSHIP**

3 credits.

Investigates how school leaders develop and use technological tools and systems to improve student learning and effect change in schools.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 845 – SCHOOL-LEVEL LEADERSHIP**

3 credits.

Dimensions of school-level leadership includes a focus on dimensions of the principal's leadership role, leadership tasks needed to advance equity and excellence in student learning, and distributed leadership.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 846 – THE SCHOOL SUPERINTENDENCY**

3 credits.

Investigation of leadership and political theories, professional competencies, and the personal commitment involved in the role of the school superintendent. Covers the evolution of theoretical and practical perspectives of the school superintendence, including internship experiences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 847 – INSTRUCTIONAL LEADERSHIP AND TEACHER CAPACITY**

3 credits.

Learn to create and sustain successful teaching and learning environments. Designed to provide teachers, learning specialists, principals, and other administrators with the foundations of research, theory, and best practices of instructional leadership to enhance teachers' capacity for equity and excellence in student learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 848 – PROFESSIONAL DEVELOPMENT AND ORGANIZATIONAL LEARNING**

3 credits.

Examines educators' professional learning in organizations and its contributions to organizational change, learning, and renewal.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ELPA 860 – ORGANIZATIONAL THEORY AND BEHAVIOR IN EDUCATION**

3 credits.

Theoretical constructs and empirical research relating to administering organizations in education. Emphasis on administrative behavior with special attention to planning and organizational improvement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 863 – RACE, CLASS AND EDUCATIONAL INEQUALITY**

3 credits.

Critically examines race and class inequality in education, including the importance of race and class at multiple levels of analysis, including the classroom and school, as well as the family, neighborhood, and community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 870 – THE POLITICS OF EDUCATION**

3 credits.

Policy development in education as a political process; community power, state and national politics in educational decision making; role of leadership and pressure groups, particularly the educational lobbies, in the shaping of educational policy at local, state, and national levels.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 875 – THEORY AND PRACTICE OF EDUCATIONAL PLANNING**

3 credits.

Theory, research and practice in advanced program planning and evaluation involving elementary, secondary and higher and post-secondary education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 878 – THE AMERICAN COMMUNITY COLLEGE**

3 credits.

Addresses policies, trends, and debates in the evolution of the American community college from the beginning of the 20th century to the present, as well as current research on the community college and the diverse body of students it serves. Topics include, but are not limited to, governance and administration, faculty and advising, credential completion and transfer, enrollment patterns, developmental education, complexities surrounding students' goals and aspirations, and the cooling-out versus warming-up effect of the community college. Through class discussions and the culminating course project (research study or policy proposal), course participants will engage in a critical, scholarly examination of the American community college, considering its strengths and weaknesses, as well as opportunities and challenges within the broader context of education.

**Requisites:** Graduate Students Only**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA 880 – ACADEMIC PROGRAMS IN COLLEGES AND UNIVERSITIES**

3 credits.

Explores higher education curriculum including academic program philosophy and design, planning and development, program innovations, liberal education, academic majors, graduate and professional education, program review and evaluation.

**Requisites:** ELPA 715**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ELPA 881 – IDEAS OF THE UNIVERSITY: IMAGES OF HIGHER LEARNING FOR THE 21ST CENTURY**

3 credits.

Explores alternative images and models to guide universities in the twenty-first century by engaging a diverse range of voices representing multiple stakeholders.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA 882 – MINORITY-SERVING INSTITUTIONS OF HIGHER EDUCATION**

3 credits.

Examines the origins, contemporary landscape, structures, and stakeholders of minority-serving institutions (MSIs) -- historically black colleges and universities (HBCUs), Hispanic-serving institutions (HSIs), and tribal colleges and universities (TCUs) -- including related challenges and opportunities for research and practice.

**Requisites:** ELPA 701**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ELPA 883 – PERSPECTIVES ON COLLEGE STUDENT IDENTITY AND DEVELOPMENT**

3 credits.

An introduction to identity and college student development theory that can either be applied to higher education administration practice or to research in higher education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ELPA 885 – LEADERSHIP FOR STUDY ABROAD PROGRAMS AND INTERNATIONAL STUDENT SERVICES**

3 credits.

A comprehensive understanding of leadership and administration of higher education study abroad programs and international student services. Delving into the latest discussion and debates on this subject from both researchers' and practitioners' points of view, serves as a venue to develop knowledge and expertise in developing and implementing policies, programs, and strategies for optimizing leadership for study abroad programs, international student services, and international enrollment management.

**Requisites:** Declared in Educational Leadership and Policy Analysis: Global Higher Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ELPA 886 – INTERNATIONALIZATION OF HIGHER EDUCATION**

3 credits.

Close look at issues, trends, and challenges concerning internationalization in higher education in both the U.S. and foreign countries. Focus includes internationalizing teaching and learning, international partnerships and collaborations, international student recruitment and advising, study abroad etc.

**Requisites:** Declared in Educational Leadership and Policy Analysis: Global Higher Education MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ELPA 887 – DIVERSITY AND INEQUALITY IN HIGHER EDUCATION**

3 credits.

Survey of equity issues related to higher education access, admissions, transitions, persistence, and success. Focuses on the role of inequities across categories such as race, class, sex, gender, sexual orientation, language, nationality, or religion in higher education alongside considerations as to how researchers and practitioners can better communicate with one another about diversity issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**ELPA 888 – ASSESSMENT IN HIGHER EDUCATION**

3 credits.

An overview of the key concepts, tools, and practices of assessment in academic and student services settings. A theoretical and practical basis for choosing, designing and using assessment and evaluation tools will also be provided.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 890 – APPLIED RESEARCH IN EDUCATIONAL ADMINISTRATION**

3 credits.

Supervised research on topics in the administration of elementary and secondary education.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 900 – INTERNSHIP IN EDUCATIONAL ADMINISTRATION**

1-3 credits.

Internship completed in a school setting. Provides the opportunity to practice the application of knowledge gained in the academic program, examine administrative practice, and use reflection to improve practice.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ELPA 910 – SEMINAR IN EDUCATIONAL LAW**

3 credits.

Interpretation and critique of legal authority impacting education. Topics may include education and religion, students' rights, teachers' rights, and federal involvement in education.

**Requisites:** ELPA 840 or 841

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ELPA 911 – AUTHENTIC PEDAGOGY AND ACHIEVEMENT**

3 credits.

Concentrates on a specific formulation of authentic intellectual work that has a compelling research base. Critical analysis of some of the roots of authentic pedagogy, its research base, its connections to other formulations (critical pedagogy, culturally relevant pedagogy), as well as theoretical perspectives and empirical studies on pedagogy's role in the reproduction of inequality and its possibilities for social justice. Read seminal works on pedagogy and assessment, in the sociology of education, and in critical/post-structural theory applied to teaching, and relate them to both current assessment practices/policies and education leadership.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 940 – SPECIAL TOPICS SEMINAR IN EDUCATIONAL LEADERSHIP**

1-3 credits.

Research on and/or discussion of selected topics in educational leadership and policy analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ELPA 960 – SEMINAR IN EDUCATIONAL FINANCE**

3 credits.

Problems of financing education; school financial management; and related research.

**Requisites:** ELPA 832

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ELPA 961 – CRITICAL ISSUES IN EDUCATIONAL POLICY**

3 credits.

Orients contemporary policy issues in education by connecting education policy to rigorous research evidence, using a theoretically motivated and disciplinary-based approach to understand educational policies, processes, and outcomes. Considers current efforts to "translate" key research findings to practitioners, policymakers, and laypersons in schools and communities, where the results can help improve educational practice and results. Discusses how research evidence from a range of disciplines - including psychology, sociology, social work, and economics - has been, is being, and could be applied to educational practice and education policy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ELPA 965 – SEMINAR IN THE POLITICS OF EDUCATION**

3 credits.

Research related to power structure, decision making, pressure groups, and professional influence in the formulation of public policy in education at the local, state, and national levels.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ELPA 990 – RESEARCH OR THESIS**

1-12 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ELPA 999 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## EDUCATIONAL POLICY STUDIES (ED POL)

**ED POL/HISTORY 107 – THE HISTORY OF THE UNIVERSITY IN THE WEST**

3 credits.

Traces the development of higher education and, specifically, the institution known as the "university," in the United States and Europe since the Middle Ages. Concentrates on the intellectual, political, and social history of higher education, focusing particularly on the history of the "university" as an IDEA, an INSTITUTION, and as a community of PEOPLE, including students and faculty.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL 112 – GLOBAL EDUCATION THROUGH FILM**

3 credits.

Introduces global educational issues, policies, and practices through films. Considers education in context, thinking critically about the role of education in the world. Compares across issues, places, policies, and practices. Examines the diversity of global educational spaces and practices, both in and out the classroom, and the purposes of education in society, including how political socialization, economic development, social mobility, and social solidarity are often in conflict.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ED POL 140 – INTRODUCTION TO EDUCATION**

3 credits.

An introduction to fundamental educational questions, concepts, perspectives and ideas, designed to enable thoughtful examination and assessment of proposed and existing educational policies and practices.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL/HISTORY 143 – HISTORY OF RACE AND INEQUALITY IN URBAN AMERICA**

3 credits.

Examine the historical relationships between metropolitan change, economic transformation, and the construction of race and how those processes have shaped mass incarceration, educational, housing, and income inequality, and the experiences of racial/ethnic minorities who have been marginalized or discriminated against. Key questions include: What is the historical nature of inequality and opportunity in metropolitan America? What policies and ideas have historically promoted inequality, and how have those policies and ideas shifted over time? How have marginalized people responded to inequality, and what impacts have various modes of resistance had? Lastly, what is "race," how has its meaning changed over time, and how has it historically shaped inequality and opportunity?

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL 145 – INTRODUCTION TO EDUCATION POLICY**

3 credits.

Introduction to K-12 education policy, policy processes, and school governance in the United States. Examines the multiple and sometimes conflicting goals that animate education debates; the discourses and representations of schools, students, and education policies that shape policy and politics; research on education and education policy; and the various lenses and conceptual tools that can help us understand education policy. Includes original policy texts, empirical and conceptual research, current events, and film. Considers how key themes may be useful (or not) for thinking about early childhood education, higher education, and K-12 education in historical and contemporary, US and and global, contexts.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 150 – EDUCATION AND PUBLIC POLICY**

1-3 credits.

Examines a variety of topics related to educational policies, practices, and issues in social, cultural, historical, and political economic contexts in the U.S. and around the world.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED POL 180 – EDUCATION AND WHITE SUPREMACY**

3 credits.

Provides an overview of the construction of racialized identity in the US and around the world. Examines the relationship between race, ethnicity, and white supremacy as social constructions and connects this to historical and current models of schooling. Explores the concept of settler colonialism and introduces its history in the US and in Wisconsin. Fosters understanding of white supremacy and of formal schooling as national systems that often work to reinforce one another, and of alternative approaches to schooling and society that can foster equity and justice.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ED POL 197 – LISTENING TO THE LAND**

3 credits.

What if our best teacher is all around us, even under our feet? For Indigenous peoples, whose worldviews, languages, and lifeways emerge from, and sustain, reciprocal relations to place, land is always teaching. Reflect on "land as first teacher" by considering Indigenous approaches to learning, Indigenous languages in relation to land, and the current environmental health of land. Seeks to live the principles of Indigenous learning through Indigenous foodways and experiential, place-based learning activities. Together, develop a personal relationship to Teejop (Four Lakes, or the Madison region), and explore generational responsibilities to Teejop. What does the land teach? And how do people learn to listen?

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ED POL 200 – RACE, ETHNICITY, AND INEQUALITY IN AMERICAN EDUCATION**

3 credits.

Explores the complex relationships among race, ethnicity and inequality in U.S. public education through theoretical, historical, social, and cultural frameworks and perspectives. Specifically, examine how schools serve as sites where racial/ethnic inequality is produced, reproduced, and resisted through institutional structures and the "everyday" practices of teachers, students, parents, and community members. Examine how race and ethnicity intersect with other identities (e.g. gender, social class, sexual orientation, etc.). It is centrally focused on K-12 education and working in multicultural contexts.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 202 – CAREERS IN EDUCATION**

3 credits.

Explores the meaning, value, and potential of an education/social sciences major for a variety of education-related careers in the contemporary workplace. Includes a review of theories of the relationships among education, work, skills and society, analyses of contextual forces shaping education and the labor market (the Covid-19 pandemic, inequality and racism, and climate change), individual and collaborative assignments focused on developing key competencies (e.g., oral and written communication, critical thinking), and hands-on activities to provide practical tools for succeeding in college and the 21st century workplace (e.g., writing a cover letter, conducting literature reviews).

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Fall 2022



**ED POL 203 – INTERNSHIP IN EDUCATION**

1-3 credits.

Provides the opportunity to reflect and critically analyze work experience in the field of education and enhance career opportunities through the exposure to the nexus of theory and practice.

**Requisites:** None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, for 3 number of completions**ED POL 205 – LANGUAGE AND SOCIAL INEQUALITY**

3 credits.

Examine cultural and language politics, policies, and practices in education. Read in the fields of anthropology, sociolinguistics, and language policy to consider how language policies, politics, and practices either reinforce or reduce educational and social inequality in the U.S. Participate in a community-based learning site in order to put concepts from the course into practice and learn about possible careers in education.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 209 – INTRODUCTION TO QUANTITATIVE METHODS IN EDUCATION POLICY**

3 credits.

Introduction to how quantitative inference is used in education policy. Focuses on the use of quantitative reasoning as a tool to analyze and interpret data. Activities support understanding the basics of generating and interpreting data in both visual and numerical form. Includes a practical component that provides opportunities to practice interpreting and writing about data.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed - Quantitative Reasoning Part B**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 210 – YOUTH, EDUCATION, AND SOCIETY**

3 credits.

Explores the study of youth through theoretical, historical, social, and cultural perspectives with a focus on Minoritized Youth; interrogates the concept of "youth" as a socially constructed category; examines how "youth" have been positioned within educational, political, economic, and social contexts; analyzes how youth's racialized experiences intersect with other social identities: social class, gender, and sexuality. Themes explored: conceptions of youth as a social category, education and schooling, race, gender, sexuality, politics and activism, community-based learning, criminal justice, media, and popular culture. Uses historical and contemporary "texts" and current events to study the lived experiences of young people within diverse racial, cultural, gendered, sexualized and classed contexts. Reflect on own experiences as "youth," their relationship to education and other social institutions, and how it informs understanding of society, educational theory and practice.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 212 – EDUCATION FOR SOCIAL JUSTICE**

3 credits.

Learn theories and practices of educating for social justice, a pedagogical-political approach based on participatory methodologies that is committed to positive social change. Discuss popular education, peace and human rights education, critical pedagogy, and related approaches. Engage in theoretical debates, focusing on the ideas of transformative educators such as Paulo Freire and bell hooks, and learn about radical educator collectives and transformative education efforts in districts, schools, classrooms, community associations, and NGOs from around the world.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ED POL 220 – HUMAN RIGHTS AND EDUCATION**

3 credits.

Explores questions related to human rights and education, from the individual to the global level; from the abstract to the practical: What does it mean to be human? How do we learn to be human? What rights mark a human being? Do all human have rights? If they have a right to education, do they have a right to a particular kind of education? Can one global education and human rights model best meet the needs of our incredibly diverse global population? Can the global human rights framework improve current educational, national, social, and economic inequities? How so? How does education as a human right relate to human rights education? and who should decide the answers to these questions, and how? Investigates the tensions and boundaries of the human rights framework to reduce social inequality through methodological inquiries in educational case studies, including: educational inequality; victims of the war on drugs; working children's rights; and climate change.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 237 – WEALTH, POVERTY AND INEQUALITY: TRANSNATIONAL PERSPECTIVES ON POLICY AND PRACTICE IN EDUCATION**

3 credits.

Examines poverty, inequality, and education from a theoretical, historical, and practical perspective through an introduction to historical and contemporary debates on wealth, poverty, and inequality. Interrogates these debates in relation to policies, practice, and institutions of education.

**Requisites:** None**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 240 – COMPARATIVE EDUCATION**

3 credits.

Examines the socio-cultural, political and economic forces that shape education around the world, including in the U.S. Explores a series of essential questions about the means and ends of education, including: the purposes of schooling in different locations; the role of schooling in producing inequality or supporting social change, particularly in relation to class, race, gender, migration, language, and abilities; global educational reform; global educational assessments; curriculum and pedagogy; and teacher education.

**Requisites:** None**Course Designation:** Breadth – Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 260 – INTRODUCTION TO INTERNATIONAL EDUCATION DEVELOPMENT**

3 credits.

Examines theories, institutions, and issues in international educational development.

**Requisites:** None**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ED POL 274 – EDUCATION STUDIES--STUDY ABROAD/GLOBAL EDUCATION**

1-3 credits.

Topics vary reflecting the specializations, expertise, and curricula of study-abroad programs.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**ED POL 300 – SCHOOL AND SOCIETY**

3 credits.

Focuses on the interplay between schools and society by examining societal and cultural influences on school processes, policies, practices, and pedagogy; or, how society shapes schooling, and conversely, the ways in which schools assist in shaping society. Reflect on the purposes of schools and how these purposes have shifted over time. Examines how assumptions regarding the purposes of schooling interact with debates over how we teach, what we teach, and how we evaluate schools, teachers, and students. Identify the foundations of education in the United States and critically examine the ways in which educational practices and policies impact the lives of students.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 305 – DEMOCRACY AND EDUCATION**

3 credits.

Explores both the form(s) of education in democracies and the controversies that shape education in the contemporary U.S. context. Examines the history of elements of mass schooling in the U.S., analyzes the competing values at play in contemporary issues, and explores some of the human stories behind some of the most enduring problems in U.S. education. Discusses the necessity of education for democratic life, the challenges inherent in mass schooling in the U.S., and the varying positions that animate contemporary educational debates. Evaluates a variety of educational issues on the basis of democratic criteria such as equality, liberty, and justice.

**Requisites:** None**Course Designation:** Gen Ed – Communication Part B Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ED POL 320 – CLIMATE CHANGE, SUSTAINABILITY, AND EDUCATION**

3 credits.

Provides an overview of diverse theories and models of human-earth relations, and the causes and consequences of climate and environmental change. Develops a critical, global approach to examining the role of education, in school and out, in addressing crucial climate and environmental challenges. Focuses on a wide range of educational theories, projects, programs, levels, institutions, strategies, and policies.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Social Science or Natural Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/INTL ST 335 – GLOBALIZATION AND EDUCATION**

3 credits.

Discuss the ways education is inextricably linked to global political, economic, and social contexts. Reflect on both scholarly research and popular conceptions of market, society and schools in different geographic and cultural contexts. Approach globalization from a context-sensitive, place-based approach, rather than abstract, predictive method through interdisciplinary analysis. Explore the concept of globalization across disciplinary frameworks including anthropology, geography, and history. Provides critical analysis to understand the challenges facing education in a globalization era, to build stronger commitment to helping address those challenges, and a set of skills for researching and writing about them. Examine the following "problem-spaces": globalization and migration; globalization and race; global testing and assessment; marketization of education; global city development and higher education; youth culture and globalization.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 345 – ECONOMICS OF EDUCATION**

3 credits.

Engages with contemporary issues in the economics of education across the K-12 and postsecondary policy arenas in the US and beyond. With foundations in human capital and the education production function, covers a wide variety of topics, including teacher labor markets and teacher quality, school choice, K-12 and higher education finance, and the individual and collective returns to education. Discuss, present, and critique education policy issues through the lens of economics and apply course content to current issues in education policy, including creation and dissemination of recommendations for education policy and practice.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ED POL 350 – TOPICS IN EDUCATION STUDIES**

3 credits.

Examines contemporary topics and debates in education studies; develops research, analytical, and other skills to work in education careers.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ED POL 399 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/HISTORY 412 – HISTORY OF AMERICAN EDUCATION**

3 credits.

Examines the history of education in America from the colonization of North America to the present to consider education in its broadest sense – as a process of individual development and cultural transmission. Explores such topics as the rise of common schools in the urban North; the education of Native Americans, immigrants, slaves, and free blacks; the evolution of teacher training (primarily for women); various philosophies of "progressive" school reform; the politics of desegregation, bilingual education, and special education; the articulation between high school and college work; and the evolving federal role in American education.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 420 – EDUCATION IN EAST ASIA**

3 credits.

An overview and discussion on the values, histories, systems, policies, problems, and reforms of education in East Asian societies. Examines extended issues in comparative education, including education and its relation to economic development, social inequality and stratification, gender and family, ethnicity and migration, identity formation, and student movements.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**ED POL 423 – EDUCATION FOR GLOBAL CHANGE**

3 credits.

How do people conceptualize and utilize education to (attempt to) create individual, familial, community, institutional, national, and global change? Push collective understanding about the diverse ways that people have conceptualized change, its goals, and the mechanisms through which to produce change around the world. Explore a diverse range of educational approaches (including formal, informal, non-formal, and "traditional" educational models) to transforming the world. Draw on a range of disciplinary and sectoral approaches, including education, public health, and public policy; and a broad range of change models, including individual and peer behavior change, social marketing, social movements, chaos theory, and liberation theory.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ED POL 435 – EDUCATION IN EMERGENCIES**

3 credits.

The United Nations High Commissioner for Refugees (UNHCR) estimates that more than 82.4 million individuals have been forcibly displaced from their homes. More than a third of them are refugees, and more than 13 million are under the age of 18. In contrast to the portrayals of children wandering among the iconic UNHCR white tents in refugee camps, new images of refugee boys and girls attending public schools raise questions about the role of humanitarianism and education across the world. What are the causes of forced migration? Who counts as a refugee today? What do camp refugees and urban refugees have in common? How do we guarantee access to school for these populations? What would a high-quality curriculum look like for these students?

**Requisites:** Satisfied Communications A requirement and sophomore standing**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ED POL 450 – RETHINKING "AFTER-SCHOOL" EDUCATION**

3 credits.

Provides an opportunity to engage with and discuss historical, ideological, and contemporary issues within community-based after school programs at large and within the Madison context. Examine the social and political context of after school programs to better understand the ways in which they have the potential to meet important needs.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL 460 – IMMIGRATION, EDUCATION, AND EQUITY**

3 credits.

Examines policy issues surrounding the education of children from immigrant families in K-16 educational settings in the U.S. Explores the economic, social, political, and ideological contexts of immigration and education, as well as school factors and home-school relations through readings, discussions, and assignments. Considers the impact of various policy and pedagogical approaches. Course readings draw from relevant literature in educational anthropology, sociology of education, educational policy, sociolinguistics, and language pedagogy.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/HISTORY 478 – COMPARATIVE HISTORY OF CHILDHOOD AND ADOLESCENCE**

3 credits.

Examines the growth of modern childhood and adolescent sub-cultures, class differences, literary and pictorial representations, legal and demographic developments, and the growth of educational theories and institutions.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ED POL 500 – TOPICS ON SOCIAL ISSUES AND EDUCATION**

3 credits.

Explore contemporary social issues or problems and their significance for educational purposes and practices. Designed for various special topics on social issues and education.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ED POL 501 – QUALITATIVE RESEARCH METHODS IN EDUCATION**

3 credits.

Examines qualitative research methods for educational research – specifically, the role of theory, how to develop a research question, how to design a study, interviewing, conducting observations, doing initial data analysis, and presenting an original qualitative research project. Complete a series of "stepping stone" assignments (practica) and peer feedback activities designed to scaffold the research experience in an organized, supportive, informed, and meaningful way.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 505 – ISSUES IN URBAN EDUCATION IN THE U.S.**

3 credits.

Explore urban education in the United States and its relationship to broader political, social, and economic contexts; focuses on contemporary urban educational issues and students' experiences in school and community settings, the experiences of students and families of color and the relationship between race, class, gender, and inequality in urban education.

**Requisites:** Junior standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 510 – URBAN SCHOOL POLICY**

3 credits.

Examines the following questions focusing on: goals and values for urban schools, framings of "the problem" of K-12 urban schooling in the United States, evidence of the complexities and research evidence on contemporary policies for improving urban schools, and theories of urban school politics, policy, and equity-oriented school reform. Focuses on system-level educational problems, politics, and policies.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ED POL/CURRIC/HISTORY/JEWISH 515 – HOLOCAUST: HISTORY, MEMORY AND EDUCATION**

3 credits.

Explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms.

**Requisites:** Junior standing**Course Designation:** Gen Ed – Communication Part B

Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL/CURRIC/RELIG ST 516 – RELIGION AND PUBLIC EDUCATION**

3 credits.

Examines theories and practices related to the role of religion in public schooling and its accompanying tensions: political and philosophical, practical and personal.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ED POL 518 – INTRODUCTION TO DEBATES IN HIGHER EDUCATION POLICY**

3 credits.

Critical examination of debates in contemporary higher education policy. Explores the sociocultural tensions among key policy goals such as quality, equity, and efficiency, and the results (including unintended consequences) of those tensions. Examines the theory and research brought to bear on policy debates, and how they are used--or not used--to shape policy agendas.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ED POL/ELPA 542 – LAW AND PUBLIC EDUCATION**

3 credits.

Examines the legal issues related to the policy decisions and delivery of public education (elementary and secondary) in the United States. Learn how law impacts both curriculum development and curricular delivery, explore current legal controversies, constitutional issues, and learn about legal reasoning and analysis. Examines how both legislation and litigation affects public education. Particular attention is paid to law as public policy and the analysis of the same.

**Requisites:** Junior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL/PHILOS 545 – PHILOSOPHICAL CONCEPTIONS OF TEACHING AND LEARNING**

3 credits.

Examination and analysis of conceptions of teaching and learning in classical philosophical works and in contemporary literature in the philosophy of education.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/PHILOS 550 – PHILOSOPHY OF MORAL EDUCATION**

3 credits.

Critical examination of classical and contemporary conceptions of moral education.

**Requisites:** Junior standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2021**ED POL/GEN&WS 560 – GENDER AND EDUCATION**

3 credits.

Examines the relationship between gender and education and explores notions of gender as socially constructed categories and identities. Identify the ways schools (re)produce and mediate gender identities and explore the experiences of students. Draws on critical and feminist perspectives to analyze the ways gender intersects with understandings of identity performance and expression such as masculinity and femininity, as well as at the intersection of race, ethnicity, class, and sexuality in schooling processes.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/AFROAMER 567 – HISTORY OF AFRICAN AMERICAN EDUCATION**

3 credits.

An examination of the social, economic, political, and cultural issues influencing the education of Black Americans from the early nineteenth century to the 1960s.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ED POL/ANTHRO 570 – ANTHROPOLOGY AND EDUCATION**

3 credits.

An exploration of the foundational concepts and methods of educational anthropology. Examines anthropological inquiry on educational research with particular reference to cultural perspectives on education and educational systems, learning as cultural transmission, and application of anthropological knowledge to curriculum.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 575 – EDUCATION POLICY AND PRACTICE**

3 credits.

Examines teachers' and administrators' practice through research on teachers and teaching as an occupation, the everyday realities of classrooms, and a variety of frameworks for understanding the relationship between policy and educators' daily work. Considers teachers and administrators as implementers of local, state, and federal policies, while simultaneously designing and creating policies and practices themselves.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**ED POL 595 – LANGUAGE POLITICS AND EDUCATION**

3 credits.

Overview of language politics, policies, and practices in global perspective; draws on the work of anthropologists, sociolinguists, and language policy scholars to examine how language choices in and regarding schooling interact with ethnic and linguistic diversity. Consider the following questions: How and under what conditions do language policies, practices, and pedagogies redress or exacerbate inequalities? How people at the local level, including educators, negotiate language and literacy policies and politics. Uses a global lens to expand local understandings and practices.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 600 – PROBLEMS IN EDUCATIONAL POLICY**

3 credits.

Examines various debates in the field of education policy specific to special topic identified by instructor/faculty. Policy area and faculty vary each semester.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED POL 601 – RESEARCH AND EVALUATION FOR EQUITY**

3 credits.

Interdisciplinary approach to research and evaluation develops a critical approach to analyzing the quality and utility of monitoring and evaluation systems. Introduces common types of program evaluation. Focuses on the project, program, institutional, and systems levels to explore how monitoring and evaluation systems function in different settings. Asks how politics shape who evaluates, for what reasons, and with what consequences. Provides an overview of traditional and alternatives approaches to monitoring and evaluation

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED POL 602 – STATISTICS FOR RESEARCH AND EVALUATION**

3 credits.

An introduction to statistical analysis for research and evaluation. Draw on current events and policy debates when possible. Describe data and distributions; internal/external validity; sampling, inference, and evaluation designs (RCT, regression, DiD). Expect to use real data and computer software to complete assignments.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED POL 603 – RESEARCH AND EVALUATION DESIGN AND METHODS**

3 credits.

Examines applied research and evaluation design. Explains the basic components of the research process: conceptualization and measurement, sample selection, and techniques for data generation. Explores and practices research techniques, including survey, focus groups, interviews, etc. Entails a developmental sequence of assignments culminating in a research proposal.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED POL 605 – USING SECONDARY DATA: APPLIED QUANTITATIVE ANALYSIS**

3 credits.

Introduce methods for managing secondary data or data not collected for specific research purposes and analyzing it to address educational policies. Focus on quantitative techniques. Use secondary data and statistical software to complete assignments

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED POL 606 – RESEARCH AND EVALUATION PLANNING AND MANAGEMENT**

3 credits.

Focuses on the role of research and evaluation in program development. Design, plan, and manage research and program evaluations. Includes discussion and debate regarding a series of case studies. Asks how, and under what conditions, research and evaluation contribute to equity goals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

**ED POL/HISTORY 612 – HISTORY OF STUDENT ACTIVISM FROM THE POPULAR FRONT TO BLACK LIVES MATTER**

3 credits.

Explore the history of student activism in the United States, with an emphasis on the experiences racial/ethnic minority youths who have been marginalized or discriminated against. What motivated students to become politically active, and what forms did their activism take? How did student activism vary across time and space and from one group of activists to another? Why did some students become activists while others did not? What role did education and educational institutions play in their activism? What impact have student activists had, and what do their histories reveal about the capacity and mechanisms for achieving racial equity in particular and for affecting social, political, and economic change more broadly?

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ED POL/HISTORY 622 – HISTORY OF RADICAL AND EXPERIMENTAL EDUCATION IN THE US AND UK**

3 credits.

Examines the comparative history of radical and experimental education in the United States and United Kingdom since 1800. It focuses on the social, cultural, and intellectual history of diverse educational experiments, including experiments related to socialism, abolitionism, anarchism, and religious fundamentalism.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ED POL/SOC 648 – SOCIOLOGY OF EDUCATION**

3 credits.

Utilizes a sociological lens to examine American schools and schooling, with a particular focus on social inequality in the U.S. and how class, race, and gender intersect in the experiences of students. Examine how schools and schooling relate to broader social structures, institutions, and practices with a focus on inequality in public education.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/HISTORY 665 – HISTORY OF THE FEDERAL ROLE IN AMERICAN EDUCATION**

3 credits.

Examines the history of federal aid to education from 1776 to the present, with heavy emphasis on the post-World War II period. Explores the federal role in public education in the Early Republic and during Reconstruction; Traces the evolution of federal policies concerning racial desegregation, compensatory education for low-income students, bilingual education, and special education for the disabled. Critically reflect on the tradition of "local control," policy implementation and evaluation, accountability, block grants, interest groups and lobbies; nationally standardized testing, and the different goals assigned to public schooling in the United States (e.g., social integration/inclusion, individual academic achievement, etc.).

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**ED POL 675 – INTRODUCTION TO COMPARATIVE AND INTERNATIONAL EDUCATION**

3 credits.

Introduction to the origins and development of the field of comparative and international education (CIE) and to explore how scholars engage some of the theoretical, ideological, methodological, and topical debates that characterize research in the field of CIE policy.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL/CURRIC 677 – EDUCATION, HEALTH AND SEXUALITY: GLOBAL PERSPECTIVES AND POLICIES**

3 credits.

Employs a lifecycle approach to examine issues at the intersection of education and health that people face throughout the world, but especially in lower-income countries. Particular attention is placed on sexuality education, reproductive health, and infectious disease epidemics.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2013**ED POL 699 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

### **ED POL 701 – INTRODUCTION TO EDUCATIONAL POLICY STUDIES**

3 credits.

An introduction to diverse scholarly perspectives in educational policy studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ED POL/AFROAMER/HISTORY 712 – EDUCATION AND THE CIVIL RIGHTS MOVEMENT**

3 credits.

Explores the historical relationship between education and the African American freedom struggle from the early twentieth century to the present. Topics include school segregation, desegregation, and resegregation; high school and college student activism; Black Power; civil rights protest strategies and tactics, and the role of the federal government.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **ED POL/HISTORY 713 – HISTORY OF HIGHER EDUCATION IN EUROPE AND AMERICA**

3 credits.

Development of colleges, universities, and higher learning in Europe and America.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **ED POL/COUN PSY/CURRIC/ED PSYCH/ELPA/RP & SE 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ED POL 721 – GLOBAL SERVICE LEARNING AND REFLECTION**

3 credits.

Skills and techniques for thinking critically about what it means to be involved in global service and to be an agent of social change. This community-based learning course is designed to address three aspects of community-based learning: personal growth, civic learning, and a critical reflection on what it means to work in international development education. Divided into two concurrent activity streams: community-based learning experiences and classroom reflection.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **ED POL 724 – POVERTY AND EDUCATION: TRANSNATIONAL PERSPECTIVES ON POLICY AND PRACTICE**

3 credits.

Addresses current debates about the nature of poverty, how it might be ameliorated, how poverty is related to other inequities and unequal relations of power, and how theories of international development might help us analyze these changing relations around the world. Examined these questions from a theoretical, historical, and practical perspective by providing an introduction to historical and contemporary debates on poverty, with a specific focus on the politics, practices, and institutions of education. Education is often understood as a way to end poverty. What are the underlying assumptions behind this idea? What are the contemporary educational interventions designed to end poverty? What are the dilemmas, contradictions, and limitations related to these interventions? In particular, if education is supposed to end poverty, how do we understand the stratifying outcomes of educational policies, practices, and institutions in the U.S. and globally?

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **ED POL 725 – PARTICIPATORY ACTION RESEARCH AND PROGRAMMING**

3 credits.

Critically analyze and utilize a toolkit of participatory information-gathering methods designed to ensure community participation and ownership in global development and change efforts. Critically review the themes of participation, action, research, and programming, and we begin a semester long discussion about research positionality and reflexivity. Engage in a hands-on exploration of the four key stages of PARP: identification of the problem and of stakeholders, data collection, data analysis, and research-based action. Explore the literature on PARP best practices when working with marginalized groups and/in communities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ED POL 743 – COST-EFFECTIVENESS & BENEFIT-COST ANALYSIS IN EDUCATION**

3 credits.

Introduction and application of methods of economic evaluation in education focusing on the use of cost, cost-effectiveness, and benefit-cost analyses. Topics include collecting inputs; pricing; estimating costs; adjusting for inflation, amortization, and units; sensitivity analyses; measuring effectiveness; quantifying benefits; computing rates of return; and communicating results. Lecture and project based with focus on real-world application, data collection, replication, and peer review.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED POL 745 – POLITICAL ECONOMY AND EDUCATION**

3 credits.

Seeks to provide an introduction to political economy in the field of education from a theoretical, historical, and comparative perspective.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**ED POL 750 – AFRICAN EDUCATION: PAST, PRESENT AND FUTURE**

3 credits.

Survey of indigenous and introduced forms of African education, formal and informal, in comparative format. The impact of Islam and Christianity on traditional educational styles. The struggle for modernity and cultural autonomy within the context of imperialism and international rivalries. Problems of nation-building, popular participation, and human resource development; educational planning and international cooperation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**ED POL/C&E SOC/SOC 755 – METHODS OF QUALITATIVE RESEARCH**

3 credits.

Introduces qualitative, or ethnographic, research methods, emphasizing those suitable for educational and other organizational settings. Considers strengths and limitations of qualitative approaches in relation to varied research problems. Explores methodological procedures from entry into the field through writing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**ED POL 760 – SEMINAR IN INTERNATIONAL EDUCATION DEVELOPMENT**

3 credits.

Presents a comprehensive and critical understanding of the international educational development (IED) arena; the paradigms and theories that shape the field; the relationships among major actors and institutions; and themes and issues that have arisen in international educational development over the past decades.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**ED POL 761 – MIGRATION AND EDUCATION**

3 credits.

Addresses political economic issues related to migration and education. Drawing on the anthropology of globalization and sociology of immigration, the course reviews major theories of immigrant incorporation and exclusion processes, examines case studies of im/migrants, refugees, and displaced persons and their adaptation processes in countries in the Global North and the Global South, and considers educational practices and policies that develop to address mobility in diverse contexts. The course examines how cultural, social, political, and economic factors influence im/migrant incorporation, and how educators can facilitate im/migrant students' opportunities for learning through changes in policies, pedagogies, and curricula.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED POL/ELPA/PUB AFFR 765 – ISSUES IN EDUCATIONAL POLICY ANALYSIS**

3 credits.

Theory, research, and practical experience in educational policy analysis, including the social construction of policy problems in education; the design, implementation, and evaluation of policy responses; and the practical and ethical dilemmas of the policy analyst.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED POL 780 – SPECIAL TOPICS IN EDUCATIONAL POLICY STUDIES**

3 credits.

Topics vary each semester.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ED POL/COUN PSY/CURRIC/ED PSYCH/ELPA/RP & SE 788  
– QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD  
METHODS I**

3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL/COUN PSY/CURRIC/ED PSYCH/ELPA/RP & SE 789  
– QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD  
METHODS II**

3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED POL/GEN&WS/PUB AFFR 805 – GENDER ISSUES IN  
INTERNATIONAL EDUCATIONAL POLICY**

3 credits.

Exploration and analysis of recent debates related to gender issues in international educational policy, including the intersection of education and demographic processes, the play of history and culture, and the social construction of gender.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ED POL 810 – EDUCATION AND RESISTANCE IN COMMUNITY-  
BASED SPACES**

3 credits.

Engage with and discuss the historical, ideological, and contemporary issues surrounding community-based spaces and programs serving youth. Topics will include: grassroots organizing and activism, pedagogies of the home, academic outcomes and access to higher education, full-service community-schools/school-community partnerships, social identity, funding and philanthropy, neoliberalism and education privatization, and after school and out-of-school time education. Examine the social and political context of community-based educational efforts in order to understand how they can be nurturing spaces of resistance for youth, as well as spaces of conflict and social reproduction.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ED POL/ELPA/PUB AFFR 830 – SCHOOL FINANCE AND  
RESOURCE ALLOCATION**

3 credits.

Contemporary bases for collecting and distributing local, state, and federal funds for elementary and secondary education; problems and issues in financial support of education; current, alternative and more effective uses of educational resources.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**ED POL/ED PSYCH/ELPA/RP & SE 842 – LEGAL FOUNDATIONS  
OF SPECIAL EDUCATION AND PUPIL SERVICES**

3 credits.

Legal requirements and issues relative to special education and pupil services programs; special education, juvenile justice, programs for English language learners, programs for children who are homeless; examination of applicable federal and state statutes and case law.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL/CURRIC 855 – ISSUES IN ELEMENTARY EDUCATION**

3 credits.

Critical survey of issues and trends; their social, educational basis; implications for elementary schools; examination and analysis of major problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**ED POL 860 – PROSEMINAR: THEORY AND METHOD IN COMPARATIVE EDUCATION**

3 credits.

Critical analysis of theories, methods, and intellectual perspectives that have been employed in comparative studies of education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED POL 870 – THEORIES OF SOCIAL AND EDUCATIONAL CHANGE**

3 credits.

Analysis of several social theories emphasizing the explanation of social change, the role of education in the change process, and the implications for educational policy in contemporary society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED POL/HISTORY 903 – HISTORY OF EDUCATION OF MULTICULTURAL AMERICA**

3 credits.

Selected topics, issues and themes concerning the history of education of various groups of people of color in the United States, as well as selected issues, topics and themes focusing on immigration and ethnicity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED POL/HISTORY 906 – PROSEMINAR ON THE HISTORY OF EDUCATION**

3 credits.

Reading in European or American educational history.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ED POL/HISTORY 907 – SEMINAR-HISTORY OF EDUCATION**

1-3 credits.

Studies in European and American educational history.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ED POL/SOC 908 – SEMINAR-SOCIOLOGY OF EDUCATION**

3 credits.

Selected topics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ED POL 911 – SEMINAR IN URBAN EDUCATION**

3 credits.

Historical and contemporary urban educational issues and policies. Emphasis on the relationship between educational issues in U.S. cities and other issues in cities and metropolitan regions (e.g. housing, poverty, gentrification, community development), as well as the policies and practices that seek to address these issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED POL/SOC 955 – SEMINAR-QUALITATIVE METHODOLOGY**

3 credits.

An intensive, practice-oriented exploration of one qualitative research method such as participant-observation, interviewing, narrative analysis, oral history or ethnography. Treatment of the method includes: logics of inquiry, analysis of data obtained through the method, and uses of the method.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ED POL 962 – SEMINAR IN CROSS NATIONAL STUDIES OF EDUCATIONAL PROBLEMS**

3 credits.

Topics vary. Examples: education and the formation of elites; education and socio-economic development; the social functions of examinations; comparative studies in church-state-school relationships; the status of teachers; American overseas programs in educational modernization.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021



### **ED POL/CURRIC 963 – SEMINAR-EDUCATIONAL PLANNING & CURRIC CHANGE-DEVELOPING COUNTRIES**

3 credits.

Analyses and critiques of educational plans related to the social, political, economic, and educational contexts of the target countries. Supervised practice in planning curricular change and educational reforms for particular countries in the light of realistic requirements and constraints.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

### **ED POL/ANTHRO 970 – SEMINAR IN ANTHROPOLOGY AND EDUCATION**

3 credits.

Anthropological theory, methodology, and field techniques with specific reference to school ethnography and cross-cultural studies of socialization and education. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **ED POL 990 – RESEARCH OR THESIS**

1-12 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **ED POL 999 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **EDUCATIONAL PSYCHOLOGY (ED PSYCH)**

### **ED PSYCH/ASIAN/COUN PSY/PSYCH 120 – THE ART AND SCIENCE OF HUMAN FLOURISHING**

3 credits.

Explore perspectives related to human flourishing from the sciences and humanities; investigate themes such as transformation, resilience, compassion, diversity, gratitude, community; expand self-awareness, enhanced social connectivity, and ability to change; formulate a sense of what it means to lead a flourishing life that sustains meaningful and fulfilling engagement with studies, relationships, community, and career.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ED PSYCH 215 – PROBABLY CORRECT: HOW TO THINK WITH STATISTICS AND DATA**

3 credits.

Introduces concepts and tools of statistical thinking and analysis, coordinated with activities designed to develop statistical literacy and decision-making skills in real-world problem contexts.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **ED PSYCH 301 – HOW PEOPLE LEARN**

3 credits.

Introduction to theories of learning in formal and informal settings, including theories related to memory, learning, and intelligence; cognitive, social, and affective aspects of learning; the influence of context on learning, including learning with psychological tools, such as language and technological resources; individual differences that may affect learning; and practical applications of learning theory.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH 320 – HUMAN DEVELOPMENT IN INFANCY AND CHILDHOOD**

2-3 credits.

Normative processes and individual differences in physical, mental, social and emotional development and behavior from infancy through late childhood.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 321 – HUMAN DEVELOPMENT IN ADOLESCENCE**

2-3 credits.

Physiological, social, and cognitive changes which characterize the transition from childhood to adult life.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 322 – THE PSYCHOLOGY AND MORAL DEVELOPMENT OF FORGIVENESS**

3 credits.

Introduction to the psychology of forgiveness, including development and variations in appropriation of forgiveness, consequences of forgiving, and separating ideas of reconciliation and forgiveness.

**Requisites:** None**Repeatable for Credit:** No**ED PSYCH 326 – MIND, BRAIN AND EDUCATION**

3 credits.

Provides an overview of methods and findings at the interface between education and neuroscience. Findings on brain development from birth to adolescence, brain changes in response to learning and how individual differences in brains relate to individual differences in learning. Educationally relevant domains including language acquisition and bilingualism, the brain basis of reading and mathematics and executive functions like memory, attention and emotion will be highlighted.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 331 – HUMAN DEVELOPMENT FROM CHILDHOOD THROUGH ADOLESCENCE**

3 credits.

Social and psychological aspects of human development from early childhood through adolescence; implications for education.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 470 – RESEARCH EXPERIENCE IN EDUCATIONAL PSYCHOLOGY**

1-6 credits.

Research experience under the supervision of a faculty member in Educational Psychology. Develop an understanding of research in a topic area and participate in team-based research. Reading includes published research studies relevant to the selected topic, and evaluation includes presentations in group meetings or a paper based on the research conducted.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH 501 – THINKING AND LEARNING**

3-4 credits.

Designed to explore the psychological principles that are relevant to learning, knowing, and teaching. Focuses on ideas, questions, and contextual applications. Reflect on personal approaches to learning, knowing, and teaching, and think about past, present, and future experiences through a variety of different lenses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 505 – FUNDAMENTAL STATISTICS IN LEARNING ANALYTICS**

1 credit.

Logic and methods of statistics used in the field of learning analytics. Emphasizes concepts and application rather than computational details to build fundamentals in the areas of inferential statistics. Reliability and validity, scalability, and the implications of inference in applied statistical methodology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ED PSYCH 506 – CONTEMPORARY ISSUES IN EDUCATIONAL PSYCHOLOGY**

3 credits.

Influence of educational psychology upon issues and innovations in education.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ED PSYCH 509 – EMBODIED COGNITION & EDUCATION**

3 credits.

Theories of embodied cognition, and related theories of enacted, extended, and embedded cognition, have had increasing influence on general theories of cognition and philosophy of mind, and therefore have importance for education. Featuring interdisciplinary work, with readings and topics drawn from scholarly literature from several fields, including: neuroscience, psychology, philosophy, robotics and artificial intelligence, phenomenology, linguistics, and anthropology. Develop familiarity with the prevailing theories, empirical findings, and methodologies used to investigate ways that the body and body-based processes (such as perception) influence and constitute cognition, and the implications and applications of embodied cognition for education, including learning, assessment, and teaching practices. Apply these theories to research and design projects.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ED PSYCH 525 – LEARNING ANALYTICS THEORY AND PRACTICE**

5-6 credits.

Application of data mining techniques to large educational datasets to gain important insights into how people learn. Examines the spectrum of prevalent learning analytics methods and applications, from institutional effectiveness, to classroom-level interventions, to standardized assessments, and beyond.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 533 – THINKING, FEELING, & LEARNING**

3 credits.

Covers the cognitive and emotional foundations of behavior with special reference to processes of learning and change. How does the science of thinking and feeling inform interventions such as teaching, counseling, or parenting? Topics covered include: dual-systems theories, neural and behavioral aspects of emotion and cognitive control, intuition, and expertise. Focus on the relation between unconscious, automatic processes and deliberate, effortful processes guiding behavior.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 540 – INTRODUCTION TO PROFESSIONAL SCHOOL PSYCHOLOGY**

2 credits.

Introduction to the professional roles and functions of school psychologists; historical development; legal and ethical issues; overview of assessment, intervention, and consultation for children and adolescents at risk for, or with, academic, behavioral, emotional, and social difficulties; applied research in school psychology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 541 – APPLIED BEHAVIOR ANALYSIS IN CLASSROOMS**

3 credits.

Application of behavioral analysis to educational situations for both exceptional and normal children and adolescents.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 542 – THE BIOLOGICAL BASIS OF BEHAVIOR**

3 credits.

Focuses on neuroscience foundational concepts relevant to clinical mental health practice, neuroanatomy, neurophysiology, psychopharmacology, disease states; ontological and phylogenetic neurodevelopment. Provides an overview of ethical/cultural implications of these scientific advances. Ethical/Cultural/Economic Applications.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 551 – QUANTITATIVE ETHNOGRAPHY**

3-4 credits.

Explores the theoretical foundations and practical use of quantitative ethnography, focusing on new insights in the field of cognitive modeling and automated coding and their use in applied fields such as anthropology, education, market research, product development, assessment, and training.

**Requisites:** ED PSYCH 301 or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ED PSYCH 560 – FOUNDATIONS OF QUANTITATIVE AND QUALITATIVE RESEARCH METHODS**

6 credits.

Presents introductory research procedures in the social sciences, including the exploration of theoretical foundations and practical use of basic tools and programs needed for quantitative and qualitative data analysis. Examines how different methodologies can complement or compete with the other, and showcases how pertinent quantitative and qualitative methods are applied in the field of learning analytics with particular emphasis on data about – and therefore issues in – learning environments such as classrooms, online courses, apprenticeships and internships, museum exhibits, after school programs, and other formal and informal educational contexts.

**Requisites:** Satisfied Quantitative Reasoning (QR) B requirement or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 563 – DESIGN OF EDUCATIONAL GAMES AND SIMULATIONS**

3 credits.

Examines the design of learning games and simulations. Topics include intelligent tutoring systems, serious games, and epistemic games, with particular emphasis on design for 21st century learning environments and learning 21st century skills.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ED PSYCH 570 – FOUNDATIONS OF EDUCATIONAL MEASUREMENT**

3 credits.

Theory of mental measurement, types of scales, reliability, validity, psychometric evaluation of published tests.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ED PSYCH 575 – INSTRUCTIONAL DESIGN FOR LEARNING ANALYTICS**

3 credits.

Explores the theoretical foundations and practical use of learning analytics for instructional design. Preparation for professional practice with hands-on experience designing learning environments modeled to predict success and retention. Focuses on understanding the ways in which learning analytics can be used to develop experiences and environments that support strategic learning outcomes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 615 – CONVERSATIONS AND VISUALIZATIONS**

3 credits.

Introduction to communication methods using learning analytics data. Presentation modes include verbal conversations and visual representations. Addresses questions including: What data is consumable? How can we make this data meaningful for a client? Etc. Practice with stakeholder reports and presentations allows engagement in meaningful and effective communication strategies to enhance understanding of learning analytics data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 621 – ADOLESCENT DEVELOPMENT IN EDUCATIONAL CONTEXTS**

2 credits.

Overview of physical, cognitive, emotional, and social development during adolescence as these factors influence and are influenced by young people's experiences in educational institutions.

**Requisites:** Declared in Curriculum and Instruction MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 622 – STRUCTURING SECONDARY SCHOOLS FOR ADOLESCENT DEVELOPMENT**

1 credit.

Designing instructional environments and learning activities to foster healthy adolescent development.

**Requisites:** ED PSYCH 621

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ED PSYCH/COM ARTS 626 – YOUTH DEVELOPMENT AND SOCIAL MEDIA: INTERDISCIPLINARY TRAINING SEMINAR**

1 credit.

Advanced level seminar that involves critical analysis of conceptual and methodological issues underlying empirical research on how social media affect and are affected by adolescent development, provides a venue for feedback on design of research studies involving youth and social media, and fosters interdisciplinary approaches to studying connections between youth development and social media use.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ED PSYCH 631 – SUPERVISION OF SCHOOL PERSONNEL**

1 credit.

An introduction to principles and techniques used in the supervision of school personnel, including pre-service candidates and professional school staff. A range of supervisory strategies aimed at enhancing teaching and learning in the classroom will be examined. Gain knowledge in clinical supervision, adult learning theory, and evaluation systems used to improve teaching and learning.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ED PSYCH 632 – PRACTICUM IN SUPERVISION OF SCHOOL PERSONNEL**

1 credit.

Designed to enhance the practical application of principles and techniques used in the supervision of school personnel covered in Supervision of School Personnel. A variety of interactive exercises and activities are incorporated into the course to assist in the development of practical skills. Apply principles covered in the course in school settings and with supervisees.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED PSYCH 633 – SUPPORTING STUDENTS' SOCIAL/EMOTIONAL WELL-BEING**

3 credits.

Examines promotion, prevention, and intervention approaches and strategies relating to how to best address students' social, emotional, and behavioral needs within the school setting. Examine ways to promote positive development within students. Evaluate prevention programs and approaches and how to implement these in school settings. Explore systematic approaches for addressing social, emotional, and behavioral needs once they are present. Explore these strategies at each level of K-12 education (i.e., elementary, middle, and high).

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE) MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ED PSYCH 640 – FOUNDATIONS OF INSTRUCTIONAL COACHING**

3 credits.

As instructional leaders, coaches play an important role in building the capacity and collective efficacy of school teams. Begin to explore the strategies at the heart of this process by engaging in discussions about the role of the instructional coach, the various models of instructional coaching, and the diverse ways instructional coaches collaborate with teachers and school leaders in and out of the classroom to support students as learners. Explore effective questioning techniques, coaching conversations, facilitation strategies, working with adult learners, navigating conflict, and verbal and nonverbal communication skills. While instructional coaches provide confidential, non-evaluative, job-embedded professional learning for fellow educators, they must also advocate for their own ongoing needs as learners, build trusting relationships with colleagues, and garner support from administration.

**Requisites:** Declared in MS Educational Psychology: Professional Education (MSPE) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH 641 – ORGANIZATIONAL CHANGE AND INSTRUCTIONAL COACHING**

3 credits.

Designed to support coaches and coaching supervisors in leadership, management, and the design of educational organizations. Explore how to build collective knowledge, effective systemic processes, and progress monitoring capacity across an organization. Includes designing and leveraging coaching roles so that they can advance organizational and student learning outcomes.

**Requisites:** ED PSYCH 640

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ED PSYCH 642 – ASSESSMENT ANALYSIS AND INSTRUCTIONAL DECISION-MAKING**

3 credits.

Assessments provide teachers with multiple types and sets of data which can inform their instructional practices. Engages participants in discussions about data sets and then provide them with opportunities to conduct analyses that link to instructional adjustments. Continually focus on how to engage in productive coaching conversations with teachers and other instructional leaders about effectively designing and using assessment data to enhance student learning outcomes.

**Requisites:** ED PSYCH 641

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 643 – PRACTICUM FOR INSTRUCTIONAL COACHING**

2 credits.

Designed to integrate and apply concepts and practices from the previous coaching courses, engage in discussions and readings to think critically and reflect on coaching practices. Engage in coaching activities at the individual and/or team level and take an active role in the online Instructional Coaching Professional Learning Community at UW-Madison. Provides additional opportunities to engage in collaborative inquiry into coaching practices that account for sociocultural and student-centered instructional practices, attention to components of adult learning theory, and analysis of coaching roles through language use and norms of facilitation.

**Requisites:** ED PSYCH 642**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 695 – CAPSTONE IN LEARNING ANALYTICS**

5-6 credits.

Introduces guest speakers who specialize in applying learning analytics in a variety of professional environments and to a variety of time-sensitive topics (spanning between the student-level within a classroom, institutional effectiveness at a university, educational technology development, national standardized assessments, and beyond). Engage in a comprehensive consulting project that pairs student teams with a learning organization of their choice to design and produce a consulting report to be presented to key stakeholders. Builds on knowledge and skills learned in prior courses and requires application of program concepts in authentic contexts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 699 – INDEPENDENT READING UNDERGRAD**

1-6 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH 709 – SEMINAR IN RESEARCH IN EDUCATIONAL PSYCHOLOGY I**

3 credits.

Areas of research in field, emphasis on logic of inquiry and development of strategies for investigating particular problems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 710 – SEMINAR IN RESEARCH IN EDUCATIONAL PSYCHOLOGY II**

3 credits.

Planning and conducting empirical research project, with assistance from faculty advisor and course faculty.

**Requisites:** ED PSYCH 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 711 – CURRENT TOPICS IN EDUCATIONAL PSYCHOLOGY**

1-3 credits.

Current issues in educational psychology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH 712 – EDUCATIONAL PSYCHOLOGY DIVERSITY SEMINAR**

1 credit.

Applies principles of educational psychology to the study of various aspects of diversity in human learning and development. Course readings and participation in diversity events sponsored by the department or other university organizations form the basis for class discussions of how diversity impacts the study of educational psychology.

**Requisites:** Declared in Educational Psychology PhD or School Psychology PhD program.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**ED PSYCH 720 – CHILD DEVELOPMENT**

3 credits.

Individual development in infancy and childhood. Individual differences in and contextual influences on physical, cognitive, social, and personality development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 721 – ADOLESCENT DEVELOPMENT**

3 credits.

Individual differences in and contextual influences on physical, cognitive, social, and personality development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH/COUN PSY 723 – DEVELOPMENTAL PROCESSES ACROSS THE LIFE SPAN**

3 credits.

Life-span perspective on studying individual development from conception to death. Emphasis on multidisciplinary, multidirectional, and contextual approaches to physical, psychological, social, and intellectual developmental processes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ED PSYCH/HDFS 725 – THEORY AND ISSUES IN HUMAN DEVELOPMENT**

3 credits.

This course covers both classic and contemporary theories, providing students with a firm grounding in the theoretical perspectives that have shaped and are shaping understandings of human development across the life-span. The course explores the historical roots of contemporary perspectives and examines the development of theoretical conceptualizations both within and across theoretical perspectives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH/COUN PSY/HDFS 726 – ETHNIC AND RACIAL DIVERSITY IN SOCIAL DEVELOPMENT**

3 credits.

Review of empirical and theoretical research on ethnic/racial diversity in social development across childhood, adolescence and early adulthood with emphasis on implications for counseling and school psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ED PSYCH/COUN PSY/RP & SE 736 – SEMINAR IN PSYCHOLOGY OF INDIVIDUAL DIFFERENCES**

3 credits.

Seminar in the psychology of individual differences, providing broad and general coverage of theory and research related to individual and cultural differences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED PSYCH/COUN PSY/RP & SE 737 – SEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY**

3 credits.

Seminar in the history of psychology, providing broad and general coverage of the development of psychology as a scientific discipline. Includes coverage of philosophy of science and systems of psychological inquiry, with applications to current research in psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ED PSYCH 740 – COGNITIVE ASSESSMENT OF CHILDREN IN THE SCHOOLS**

3 credits.

Theories of intelligence and intelligence testing, construction and validation of the Binet and Wechsler tests, administration of tests, interpretation of test results and report writing, recent research in intelligence testing.

**Requisites:** ED PSYCH 760

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 741 – SOCIAL, EMOTIONAL, AND BEHAVIORAL ASSESSMENT**

3 credits.

Knowledge and skills necessary to conduct comprehensive assessments of social, emotional, and behavioral difficulties in children and adolescents; theoretical foundations; assessment procedures and instruments; diagnostic and eligibility criteria; early identification and intervention.

**Requisites:** ED PSYCH 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 742 – ASSESSMENT AND INTERVENTION FOR ACADEMIC SKILL PROBLEMS**

3 credits.

Assessment methods and intervention strategies for children with academic skill problems in educational settings; practice in application of assessment and intervention approaches to case studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 743 – DESIGN AND ANALYSIS OF SINGLE-CASE RESEARCH**

3 credits.

Increases the capacity of graduate students to conduct high-quality single-case intervention research, by improving the scientific credibility of both the methodology; and the visual and statistical analysis of their studies. Equip skills and knowledge to critically analyze published intervention research and to implement quality intervention research studies.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 745 – DESIGNING AND MANAGING THE LEARNING ENVIRONMENT**

2 credits.

Provides knowledge and skills necessary to effectively and efficiently engage with students and manage the classroom environment. Ability to support the academic and social-emotional growth of children enhanced through knowledge gained regarding children's self-regulation, motivation, school climate, multi-tiered behavioral interventions, and school wide positive behavior support.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 752 – ENGAGING WITH EDUCATION RESEARCH**

1 credit.

An introduction to issues in consuming and conducting education research. Focus on research paradigms and methods frequently used in education research.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**ED PSYCH 760 – STATISTICAL METHODS APPLIED TO EDUCATION I**

3 credits.

Introductory descriptive statistics and statistical inference; measures of central tendency and variability, confidence intervals, theory of hypothesis testing, correlation techniques.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 761 – STATISTICAL METHODS APPLIED TO EDUCATION II**

3 credits.

Analysis of variance and covariance, multiple linear regression; chi-square and various nonparametric techniques.

**Requisites:** ED PSYCH 760**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 762 – INTRODUCTION TO THE DESIGN OF EDUCATIONAL EXPERIMENTS**

3 credits.

Classical experimental designs and their application to educational research, factorial treatment arrangements, confounding, repeated measures design, and related topics.

**Requisites:** ED PSYCH 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 763 – REGRESSION MODELS IN EDUCATION**

3 credits.

An applied introduction to regression techniques is given, covering nonparametric regression, multiple linear regression and logistic regression. All applied analyses are done in the statistical programming language R.

**Requisites:** ED PSYCH 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**ED PSYCH/COMP SCI/PSYCH 770 – HUMAN-COMPUTER INTERACTION**

3 credits.

Principles of human-computer interaction (HCI); human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCI, including applications in ubiquitous, affective, assistive, social, and embodied computing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 771 – TEST CONSTRUCTION**

3 credits.

Procedures for development and analysis of educational tests and questionnaires; strategies for measurement of achievement, attitude, and interests; procedures for item analysis and assessment of reliability and validity.

**Requisites:** ED PSYCH 760**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 773 – FACTOR ANALYSIS, MULTIDIMENSIONAL SCALING AND CLUSTER ANALYSIS**

3 credits.

Major types of factor models, nonmetric multidimensional scaling methods and clustering procedures. Methods of data collection, mathematical algorithms, estimating the number of factors, transformation and identification of factors.

**Requisites:** ED PSYCH 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH/ELPA 780 – TEACHER LEADERSHIP AND LEARNING COMMUNITIES**

3-4 credits.

Focuses on knowledge and skills teachers need to be leaders in their schools in facilitating the development of strong learning communities that include students, teachers, families, administrators, and other educators. Understand key concepts, theories, and models used in building and sustaining effective learning communities; develop skills in creating practices that contribute to effective teacher leadership; and identify and strengthen skills needed to lead schools to build learning communities that promote student learning.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS I**

3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 789 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS II**

3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 791 – MASTER OF SCIENCE FOR PROFESSIONAL EDUCATORS CAPSTONE**

1-4 credits.

Culminating project that must be completed successfully to qualify to earn the degree. Integrates knowledge, skills, and experiential learning to demonstrate a broad mastery of learning across the program curriculum.

**Requisites:** Declared in Educational Psychology: Professional Educator (MSPE)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 792 – TOOLS FOR THOUGHT**

3 credits.

Analysis of educational technologies, exploring relationships among tools, thinking, and learning. Studies of current and historical tools are used as case studies for analyzing technology, education, and cognition.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2014

**ED PSYCH 795 – INTRODUCTION TO LEARNING SCIENCES I**

3 credits.

Survey of major theories and elementary cognitive and social processes in learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 796 – INTRODUCTION TO THE LEARNING SCIENCES II**

3 credits.

Principles of learning emphasizing higher order cognitive and social processes.

**Requisites:** ED PSYCH 795

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH/CURRIC/L I S 803 – COMPUTATIONAL RESEARCH METHODS**

3 credits.

Provides a broad overview of ways of formulating and investigating novel questions with tools from educational data mining and learning analytics including social network analysis, natural language processing, Markov modeling, Bayesian inference, and agent-based modeling.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH/CURRIC 821 – CONSTRUCTIONISM**

3 credits.

Survey of constructionist theory, research, and tools. Develop a deeper understanding of the history, theories, philosophies, tools, research, and technologies of constructionism and its children.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH/ELPA 822 – INTRODUCTION TO QUANTITATIVE INQUIRY IN EDUCATION**

3 credits.

Utilize the concepts and methods of quantitative social science research to conduct research on education issues. Topics include hypothesis testing, statistical inference, point estimates, graphic and numerical data displays, correlation and regression.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH/ELPA 827 – SURVEYS AND OTHER QUANTITATIVE DATA COLLECTION STRATEGIES**

3 credits.

Methods and concepts of survey research methods as they are commonly used in education research. Strategies include surveys (phone, mail, electronic, in person), logs/diaries, and experience sampling instruments. Emphasis is given to self-administered surveys, including periodic surveys, since these strategies are the most common in education research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ED PSYCH 828 – BEGINNING PRACTICUM IN SCHOOL PSYCHOLOGY**

1 credit.

Develop foundational competencies in the practice of professional psychology, including professional values and attitudes, individual and cultural diversity; ethical standards and policy; reflective practice/self-care; relationships; scientific knowledge and method; and research/evaluation. Develop professional identities as psychologists and emerging clinical skills.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ED PSYCH 829 – CLINIC PRACTICUM IN SCHOOL PSYCHOLOGY**

3 credits.

Develop competence in broad areas of school psychological practice, including assessment, consultation, and intervention. Deliver a wide range of psychological and educational services to clients including individual and group interventions; academic, social, emotional, and behavioral assessments; and parent and/or teacher consultation.

**Requisites:** ED PSYCH 828

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ED PSYCH 830 – FIELD PRACTICUM IN SCHOOL PSYCHOLOGY**

6 credits.

Develop competence in delivering school psychological services in a school or other applied setting under the supervision of a practicing psychologist. Provide assessment, consultation, and intervention with increasing independence under the direct supervision of field supervisors and the university coordinator.

**Requisites:** ED PSYCH 829

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ED PSYCH 840 – ADVANCED PRACTICUM IN SCHOOL PSYCHOLOGY**

1 credit.

Expand competence in delivering a range of psychological services in a variety of health service psychology settings. Specific experiences will be individualized and may allow for specialization in a specific area of practice or provide training to enhance foundational skills.

**Requisites:** ED PSYCH 830**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH/ED POL/ELPA/RP & SE 842 – LEGAL FOUNDATIONS OF SPECIAL EDUCATION AND PUPIL SERVICES**

3 credits.

Legal requirements and issues relative to special education and pupil services programs; special education, juvenile justice, programs for English language learners, programs for children who are homeless; examination of applicable federal and state statutes and case law.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 844 – CHILDHOOD AND ADOLESCENT PSYCHOPATHOLOGY IN SCHOOLS**

3 credits.

Reviews major psychological disorders of childhood and adolescence as relevant to schools; examines etiology and developmental course, documenting major characteristics and behavior correlates of disorders; provides a comparison of major diagnostic and classification systems for childhood psychopathology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 845 – PSYCHOPHARMACOLOGICAL TREATMENTS FOR CHILDREN AND ADOLESCENTS**

3 credits.

Provides an overview of psychopharmacological treatments of childhood and adolescent disorders in educational settings. Topics covered include basic biological principles of drugs and drug treatment, specific drug classifications and their biological actions, drug treatments for childhood disorders, and professional issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**ED PSYCH 871 – TEST THEORY II**

3 credits.

Theory underlying validity, scoring procedures, prediction and classification, normal, binomial, Poisson and logistic model, including item response theory models.

**Requisites:** ED PSYCH 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**ED PSYCH/HDFS/NURSING/SOC WORK 880 – PREVENTION SCIENCE**

3 credits.

This course provides a theoretical, empirical and practical foundation for prevention science as it relates to the prevention of human social problems. Research and evaluation methods, program design strategies, best practices and policy as they relate to the field of prevention are also examined. Intended for 2nd year graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH/HDFS/NURSING/SOC WORK 881 – CAPSTONE SEMINAR IN PREVENTION SCIENCE**

1 credit.

This course provides an opportunity for students to meet with prevention professionals and scholars from across campus and the community to explore current and emerging issues of prevention research and professional practice. Students must complete HDFS/ED PSYCH/NURSING/SOC WORK 880 before taking this course.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 921 – SEMINAR IN ADOLESCENT DEVELOPMENT**

2-3 credits.

Selected aspects of intellectual, emotional, physiological, personality and social development in adolescence. Understanding adolescent behavior in educational settings.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020

**ED PSYCH 925 – ADVANCED SEMINAR IN HUMAN DEVELOPMENT**

2-3 credits.

Provides an in-depth review and analysis of specific areas of human development, such as cognitive, moral, language, neurological, social, and personality development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ED PSYCH 942 – SYSTEMS OF CONSULTATION IN SCHOOL PSYCHOLOGY**

2-3 credits.

Mental health, behavioral and organization development models of consultation in school psychology. Overview of evidence-based prevention and intervention programs as implemented in a consultation problem-solving process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH 943 – INTERNSHIP IN SCHOOL PSYCHOLOGY**

1-12 credits.

Supervised individualized placements in appropriate schools, institutions, and community agencies; controlled exposure to job demands of school psychologists; experience in dealing with problem children, adolescents, and their families.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ED PSYCH/SOC WORK 945 – EVALUATION RESEARCH**

3 credits.

A comprehensive introduction to practice of program evaluation research in social welfare and human development. Developments in descriptive, experimental, quasi-experimental, theory-driven, and naturalistic evaluations detailed. Topics include assessment, evaluation design, monitoring, outcome evaluation, selection bias, program theory, meta-analysis and utilization.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED PSYCH 946 – ADVANCED ASSESSMENT AND INTERVENTION TECHNIQUES**

3 credits.

Advanced assessment practices and the corresponding link to intervention; intervention strategies and programs designed to improve the academic, emotional, behavioral and social functioning of children and adolescents.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ED PSYCH 947 – EVIDENCED-BASED CHILD AND ADOLESCENT PSYCHOTHERAPY**

3 credits.

Critical review of various psychotherapeutic approaches (cognitive, behavioral, psychodynamic) with special emphasis on identifying and implementing evidence-based assessment and interventions for a variety of behavioral and emotional problems experienced by children and adolescents.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ED PSYCH 948 – RESEARCH AND MEASUREMENT SEMINAR IN SCHOOL PSYCHOLOGY**

3 credits.

Focus on research and measurement methods, special topics, technical writing, and ethical principles in conducting research in school psychology. Emphasis on skills needed to design and complete individual research projects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ED PSYCH 960 – STRUCTURAL EQUATION MODELING**

3 credits.

Introduction to the theory and practice of structural equation modeling in the educational and social sciences, including path analysis, confirmatory factor analysis and hybrid models.

**Requisites:** ED PSYCH 763

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ED PSYCH 961 – SEMINAR-STATISTICS AND RESEARCH DESIGN**

3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016



**ED PSYCH 963 – DESIGN & ANALYSIS OF QUASI-EXPERIMENTS FOR CAUSAL INFERENCE**

3 credits.

An applied introduction to causal inference with regression discontinuity designs, interrupted time series designs, non-equivalent control group designs (matching designs), and instrumental variable designs is given.

**Requisites:** ED PSYCH 762 and 763**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**ED PSYCH 964 – HIERARCHICAL LINEAR MODELING**

3 credits.

Introduction to the statistical methodology of hierarchical linear modeling, including random intercept and random slope and intercept models; models for longitudinal data; and multilevel generalized linear models.

**Requisites:** ED PSYCH 763**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ED PSYCH 965 – APPLIED BAYESIAN STATISTICS FOR EDUCATION RESEARCH**

3 credits.

Covers the basic elements of Bayesian statistics through lecture, discussion and practice. Focuses on why the Bayesian perspective provides a powerful alternative to the frequentist perspective. Topics to be covered include; Bayes' theorem, Markov chain Monte Carlo sampling and the "rjags" program, Bayesian hypothesis testing, Bayesian model building and evaluation, Bayesian approaches to missing data, Bayesian model averaging, Bayesian multilevel models and latent variable models, and philosophical debates within the Bayesian paradigm of statistics.

**Requisites:** ED PSYCH 763**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ED PSYCH 971 – ADVANCED SEMINAR IN EDUCATIONAL MEASUREMENT AND STATISTICS**

1-2 credits.

Discuss a different current article from the educational statistics and measurement literature. Explore a variety of subjects in which one might like to eventually conduct research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**ED PSYCH 990 – RESEARCH OR THESIS**

1-12 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH/COUN PSY/PSYCH/RP & SE 995 – PREDOCTORAL INTERNSHIP**

0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ED PSYCH 999 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## ELECTRICAL AND COMPUTER ENGINEERING (E C E)

**E C E 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Sophomore standing or member of Engineering Guest Students**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E C E 203 – SIGNALS, INFORMATION, AND COMPUTATION**

3 credits.

Introduction to the signals, information, and computational techniques in electrical engineering.

**Requisites:** (MATH 211, 217, 221, or 275) or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023

**E C E 204 – DATA SCIENCE & ENGINEERING**

3 credits.

A hands-on introduction to Data Science using the Python programming language. Data-centric and computational thinking. Describe, analyze, and make predictions using data from real-world phenomena. Programming in Python. Importing, manipulating, summarizing, and visualizing data of various types. Notions of bias, fairness, and ethics in data science.

**Requisites:** MATH 112, 114, 171, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 210 – INTRODUCTORY EXPERIENCE IN ELECTRICAL ENGINEERING**

2 credits.

An introduction to electrical and electronic devices, circuits and systems including software and hardware focusing on a real-world project.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 219 – ANALYTICAL METHODS FOR ELECTROMAGNETICS ENGINEERING**

2 credits.

Reviews basic calculations in electromagnetic engineering upon which all higher level concepts and physical model construction are based. It emphasizes quantitative calculation mastery in three spatial dimensions. Applies analysis tools from vector calculus to the calculation and prediction of electrical system properties. Examples include calculating electric and magnetic fields, electric potentials, total electric charge, and electric flux from charge or current sources.

**Requisites:** MATH 234 or 376, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 220 – ELECTRODYNAMICS I**

3 credits.

Potential theory; static and dynamic electric and magnetic fields; macroscopic theory of dielectric and magnetic materials; Maxwell's equations; boundary conditions; wave equation; introduction to transmission lines.

**Requisites:** (PHYSICS 202, 208, or 248) and E C E 219, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 230 – CIRCUIT ANALYSIS**

4 credits.

Kirchhoff's laws, resistive circuits, equivalent circuits using Thevenin-Norton theories, small signal analysis, dc operating point, first-order circuits, second-order circuits, SPICE and circuit simulation methods, sinusoidal steady state, phasors, poles and zeros of network functions, ideal transformed linear and non-linear two-port networks.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/PHYSICS 235 – INTRODUCTION TO SOLID STATE ELECTRONICS**

3 credits.

An introduction to the physical principles underlying solid-state electronic and photonic devices, including elements of quantum mechanics, crystal structure, semiconductor band theory, carrier statistics, and band diagrams. Offers examples of modern semiconductor structures. Prior experience with MATLAB [such as E C E 203] is strongly encouraged but not required.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 252 – INTRODUCTION TO COMPUTER ENGINEERING**

3 credits.

Logic components built with transistors, rudimentary Boolean algebra, basic combinational logic design, basic synchronous sequential logic design, basic computer organization and design, introductory machine- and assembly-language programming.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 270 – CIRCUITS LABORATORY I**

1 credit.

Experiments cover Kirchhoff's laws, inductors, basic operational amplifier circuits, and frequency response.

**Requisites:** E C E 210 and (E C E 230 or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 271 – CIRCUITS LABORATORY II**

1 credit.

Experiments cover electronic device characteristics, limitations and applications of operational amplifiers, and feedback circuits.

**Requisites:** E C E 270 and (E C E 340 or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 303 – INTRODUCTION TO REAL-TIME DIGITAL SIGNAL PROCESSING**

2 credits.

Emphasizes the implementation of DSP algorithms on a digital signal processor in "real-time." Many of the signal processing algorithms that were used in E C E 203 will be reviewed in MATLAB and then will be implemented on a floating point signal processor in "real-time" using the C programming language. Explore many basic digital signal processing processes in real-time. Gain the ability to create and develop your own Digital Signal Processing projects for a modern digital signal processor using an Integrated Development Environment. Lab hardware will be provided.

**Requisites:** E C E 203 or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 304 – ELECTRIC MACHINES LABORATORY**

1 credit.

Terminal characteristics of electric machines, elements of speed control, voltage regulation, and applications in systems. Emphasis on the experimental approach to the solution of complex physical problems.

**Requisites:** (E C E 355, 356, or concurrent enrollment) or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 305 – SEMICONDUCTOR PROPERTIES LABORATORY**

1 credit.

Introduction to some fundamental properties of semiconductor materials and devices through the use of characterization techniques common in modern electronic industry. These concepts include: charge carriers; energy bands; space charge regions; carrier drift, diffusion and recombination; light emission; and lattice vibrations.

**Requisites:** E C E 271 and (E C E 335 or concurrent enrollment), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2020**E C E 306 – LINEAR ACTIVE CIRCUITS LABORATORY**

1 credit.

Direct coupled and operational amplifier characteristics; applications of feedback; practical aspects.

**Requisites:** E C E 271 and 340, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2018**E C E 308 – NONLINEAR ELECTRONIC CIRCUITS LABORATORY**

1 credit.

An experimental study of selected nonlinear electronic circuits and devices using diodes, transistors, op-amps, timers, data converters, and logic components.

**Requisites:** E C E 271 and 340, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2017**E C E 313 – OPTOELECTRONICS LAB**

1 credit.

Light detection using photovoltaic and photoconductive detectors and phototransistors. Light generation using light emitting diodes and laser diodes. Light transmission using optical fibers. Optoisolators and optical switches. Light emitting diode and liquid crystal displays.

**Requisites:** E C E 271 and 340, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 315 – INTRODUCTORY MICROPROCESSOR LABORATORY**

1 credit.

Software and hardware experiments with a microcomputer system. Assembly language programming, simple input/output interfacing, and interrupt processing in microcomputer systems.

**Requisites:** E C E 353 or concurrent enrollment, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 317 – SENSORS LABORATORY**

1 credit.

A hands-on introduction to a variety of different sensor types. Labs incorporate implementation concerns involving interference, isolation, linearity, amplification, and grounding.

**Requisites:** E C E 271 and (E C E 340 or concurrent enrollment), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 320 – ELECTRODYNAMICS II**

3 credits.

Static and dynamic electromagnetic fields; forces and work in electromechanical systems; magnetic circuits; plane wave propagation; reflection of plane waves; generalized transmission line equations; current and voltage on transmission lines; impedance transformation and matching; Smith charts.

**Requisites:** E C E 220 or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 330 – SIGNALS AND SYSTEMS**

3 credits.

Time-domain response and convolution; frequency-domain response using Fourier series, Fourier transform, Laplace transform; discrete Fourier series and transform; sampling; z-transform; relationships between time and frequency descriptions of discrete and continuous signals and systems.

**Requisites:** E C E 203 or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023

**E C E 331 – INTRODUCTION TO RANDOM SIGNAL ANALYSIS AND STATISTICS**

3 credits.

Introduction to probability, random variables, and random processes. Confidence intervals, introduction to experimental design and hypothesis testing. Statistical averages, correlation, and spectral analysis for wide sense stationary processes. Random signals and noise in linear systems.

**Requisites:** (E C E 203 or 330) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 332 – FEEDBACK CONTROL SYSTEMS**

3 credits.

Modeling of continuous systems; computer-aided solutions to systems problems; feedback control systems; stability, frequency response and transient response using root locus, frequency domain and state variable methods.

**Requisites:** E C E 330 or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**E C E 334 – STATE SPACE SYSTEMS ANALYSIS**

3 credits.

Analysis of systems using matrix methods to write and solve state-variable differential equations. Additional topics include stability, controllability, observability, state feedback, observers, and dynamic output feedback.

**Requisites:** E C E 330, MATH 319, 320, 376, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 335 – MICROELECTRONIC DEVICES**

3 credits.

Characteristics of semiconductors; study of physical mechanisms and circuit modeling of solid state electronic and photonic devices; principles of microelectronic processing and examples of integrated circuits.

**Requisites:** (E C E 220, 230, and E C E/PHYSICS/E C E 235), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 340 – ELECTRONIC CIRCUITS I**

3 credits.

A first course in modeling, characterization, and application of semiconductor devices and integrated circuits. Development of appropriate models for circuit-level behavior of diodes, bi-polar and field effect transistors, and non-ideal op-amps. Application in analysis and design of linear amplifiers. Frequency domain characterization of transistor circuits.

**Requisites:** (E C E 203 and 230) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 342 – ELECTRONIC CIRCUITS II**

3 credits.

A second course in modeling and application of semiconductor devices and integrated circuits. Advanced transistor amplifier analysis, including feedback effects. Design for power amplifiers, op-amps, analog filters, oscillators, A/D and D/A converters, and power converters. Introduction to transistor level design of CMOS digital circuits.

**Requisites:** E C E 340 or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 352 – DIGITAL SYSTEM FUNDAMENTALS**

3 credits.

Logic components, Boolean algebra, combinational logic analysis and synthesis, synchronous and asynchronous sequential logic analysis and design, digital subsystems, computer organization and design.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and COMP SCI/E C E/COMP SCI 252

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Physical Sci. Counts toward the Natural Sci req Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 353 – INTRODUCTION TO MICROPROCESSOR SYSTEMS**

3 credits.

Introduction to architecture, operation, and application of microprocessors; microprocessor programming; address decoding; system timing; parallel, serial, and analog I/O; interrupts and direct memory access; interfacing to static and dynamic RAM; microcontrollers.

**Requisites:** COMP SCI/E C E 252 and (COMP SCI 300 or 302 prior to Fall 2018), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 354 – MACHINE ORGANIZATION AND PROGRAMMING**

3 credits.

An introduction to fundamental structures of computer systems and the C programming language with a focus on the low-level interrelationships and impacts on performance. Topics include the virtual address space and virtual memory, the heap and dynamic memory management, the memory hierarchy and caching, assembly language and the stack, communication and interrupts/signals, compiling and assemblers/linkers.

**Requisites:** COMP SCI/E C E/COMP SCI 252 and (COMP SCI 300 or 302) or graduate/professional standing or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 355 – ELECTROMECHANICAL ENERGY CONVERSION**

3 credits.

Energy storage and conversion, force and emf production, coupled circuit analysis of systems with both electrical and mechanical inputs. Applications to electric motors and generators and other electromechanical transducers.

**Requisites:** E C E 230, or graduate/professional standing, or member of Engineering Guest Students, or declared in Capstone Certificate in Power Conversion and Control

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 356 – ELECTRIC POWER PROCESSING FOR ALTERNATIVE ENERGY SYSTEMS**

3 credits.

Introduction to electrical power processing technologies that are necessary to convert energy from alternative sources into useful electrical forms. Several specific alternative energy sources are examined, providing platforms for introducing basic concepts in power electronics, electric machines, and adjustable-speed drives.

**Requisites:** (E C E 230 or 376) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E C E 370 – ADVANCED LABORATORY**

2 credits.

Experiments related to the required core material.

**Requisites:** E C E 271 and (E C E 340 or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 376 – ELECTRICAL AND ELECTRONIC CIRCUITS**

3 credits.

DC and AC electrical circuit analysis methods, and analog and digital circuit design and analysis including operational amplifier linear circuits, digital combinational logic circuits, and computer interface circuits which combine both digital and analog devices for interfacing physical systems.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 377 – FUNDAMENTALS OF ELECTRICAL AND ELECTRO-MECHANICAL POWER CONVERSION**

3 credits.

Fundamentals of electromagnetic induction and application to transformers and induction heating; Lorentz forces with a focus on the operation and control of DC and AC motors and linear actuators; electrical power conversion using power electronics for motor drives and direct power converters.

**Requisites:** (MATH 234 or 376), (PHYSICS 202, 208, or 248), and E C E 376, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 379 – SPECIAL TOPICS IN ELECTRICAL AND COMPUTER ENGINEERING**

1-4 credits.

Topics of special interest to undergrads in electrical and computer engineering.

**Requisites:** Sophomore standing or member of Engineering Guest Students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**E C E 399 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 401 – ELECTRO-ACOUSTICAL ENGINEERING**

3 credits.

Principles of plane and spherical sound waves; acoustical, mechanical, and electrical analogies; electroacoustic transducer materials and techniques; specific types of transducers such as microphones and loudspeakers.

**Requisites:** E C E 203, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 411 – INTRODUCTION TO ELECTRIC DRIVE SYSTEMS**

3 credits.

Basic concepts of electric drive systems. Emphasis on system analysis and application. Topics include: dc machine control, variable frequency operation of induction and synchronous machines, unbalanced operation, scaling laws, adjustable speed drives, adjustable torque drives, coupled circuit modeling of ac machines.

**Requisites:** (E C E 355, 356, or 377), graduate/professional standing, or member of Engineering Guest Students, or declared in Power Conversion and Control Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 412 – POWER ELECTRONIC CIRCUITS**

3 credits.

Operating characteristics of power semiconductor devices such as Bipolar Junction Transistors, IGBTs, MOSFETs and Thyristors. Fundamentals of power converter circuits including dc/dc converters, phase controlled ac/dc rectifiers and dc/ac inverters. Practical issues in the design and operation of converters.

**Requisites:** E C E 342, graduate/professional standing, member of Engineering Guest Students, or declared in Capstone Certificate in Power Conversion and Control

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 420 – ELECTROMAGNETIC WAVE TRANSMISSION**

3 credits.

Transmission lines: frequency domain analysis of radio frequency and microwave transmission circuits including power relations and graphical and computer methods. Electromagnetic waves: planar optical components, pulse dispersion, phase front considerations for optical components, conducting waveguides, dielectric waveguides. Radiation: retarded potentials, elemental dipoles, radiating antenna characterization, receiving mode.

**Requisites:** E C E 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 427 – ELECTRIC POWER SYSTEMS**

3 credits.

The electric power industry, operation of power systems, load flow, fault calculations, economic dispatch, general technical problems of electric power networks.

**Requisites:** E C E 330, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 431 – DIGITAL SIGNAL PROCESSING**

3 credits.

Sampling continuous-time signals and reconstruction of continuous-time signals from samples; spectral analysis of signals using the discrete Fourier transform; the fast Fourier transform and fast convolution methods; z-transforms; finite and infinite impulse response filter design techniques; signal flow graphs and introduction to filter implementation.

**Requisites:** E C E 330, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 432 – DIGITAL SIGNAL PROCESSING LABORATORY**

3 credits.

Implementation of digital signal processing algorithms on special-purpose and general-purpose hardware. Use of assembly and high-level languages, and simulator to develop and test IIR, FIR filters and the FFT for modern DSP chips. Scaling for fixed point arithmetic. Use of high level languages to implement real time, object oriented component based DSP systems in general purpose computers. DSP applications, including data and voice communication systems.

**Requisites:** E C E 330 and COMP SCI 300, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 434 – PHOTONICS**

3 credits.

Introduction to ray optics, physical optics and interference, applications of Fourier optics, absorption, dispersion, and polarization of light. Light sources, including lasers (gas, solid state, and semiconductor), modulation and detection of light.

**Requisites:** E C E/PHYSICS/E C E 235 and (E C E 320, PHYSICS 322, or concurrent enrollment in either one), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI/MATH 435 – INTRODUCTION TO CRYPTOGRAPHY**

3 credits.

Cryptography is the art and science of transmitting digital information in a secure manner. Provides an introduction to its technical aspects.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 436 – COMMUNICATION SYSTEMS I**

3 credits.

Amplitude, frequency, pulse, and pulse-code modulation. Narrow-band noise representation and signal-to-noise ratios for various modulation schemes. Pulse shaping, timing recovery, carrier synchronization, and equalization. Sampling, quantization and coding.

**Requisites:** (E C E 203 or 330), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 437 – COMMUNICATION SYSTEMS II**

3 credits.

Statistical analysis of information transmission systems. Probability of error, design of receivers for digital transmission through additive white Gaussian noise channels and bandlimited channels. Spread spectrum communication systems. Channel capacity, source and error control coding.

**Requisites:** (E C E 203 or 330), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**E C E/M E 439 – INTRODUCTION TO ROBOTICS**

3 credits.

Hands-on introduction to key concepts and tools underpinning robotic systems in use and development today. Intended to give students the tools to understand robotic systems, to explore robotics for their own purposes, and to pursue advanced study in the field. Students are expected to have familiarity with a high level programming language such as Python (recommended), MATLAB, Java or Julia.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 445 – SEMICONDUCTOR PHYSICS AND DEVICES**

3 credits.

Physics and properties of semiconductors, p-n junctions, metal-semiconductor contacts, homojunction and heterojunction bipolar transistor and physics, metal-oxide-semiconductor and heterostructure field-effect transistor and physics, thin-film resistors, memory devices, quantum devices.

**Requisites:** E C E 335, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E C E 447 – APPLIED COMMUNICATIONS SYSTEMS**

3 credits.

Analysis with design problems of electronic communications circuits. Emphasis on the nonlinear effects of large-signal operation of active devices. Complete design of r.f. oscillator, amplifier, and mixer circuits.

**Requisites:** E C E 340 and 420, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E C E 453 – EMBEDDED MICROPROCESSOR SYSTEM DESIGN**

4 credits.

Hardware and software design for modern microprocessor-based embedded systems; study of the design process; emphasis on major team design project.

**Requisites:** E C E 315 and COMP SCI 300 (or COMP SCI 302 or 367 prior to Fall 2018), or graduate/professional standing, not open to special students. Students with credit for E C E 454 or 554 may not enroll.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 454 – MOBILE COMPUTING LABORATORY**

4 credits.

End-to-end project management; teamwork; fundamentals of disciplined development practices; introduction to mobile computing platforms and systems; design, implementation, and deployment of mobile systems and applications.

**Requisites:** COMP SCI 400 (or COMP SCI 367 prior to Fall 2018), or graduate/professional standing, not open to special students. Students with credit for E C E 453 or 554 may not enroll.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/B M E 462 – MEDICAL INSTRUMENTATION**

3 credits.

Design and application of electrodes, biopotential amplifiers, biosensors, therapeutic devices. Medical imaging. Electrical safety. Measurement of ventilation, blood pressure and flow.

**Requisites:** E C E 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E/B M E 463 – COMPUTERS IN MEDICINE**

3 credits.

Study of microprocessor-based medical instrumentation. Emphasis on real-time analysis of electrocardiograms. Labs and programming project involve design of biomedical digital signal processing algorithms. Knowledge of computer programming language like C, C++ or Java, strongly encouraged.

**Requisites:** E C E 330 and (COMP SCI 200, 220, 300, 301, or placement into COMP SCI 300), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 466 – ELECTRONICS OF SOLIDS**

3 credits.

Electronic, optical and thermal properties of crystalline solids. Energy-momentum dispersion of fundamental particles and excitations in solids leading to microscopic theories of conductivity, polarizability and permeability. Influence of materials characteristics on the performance of electronic and photonic devices.

**Requisites:** (E C E 305 or 335), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**E C E 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 491 – SENIOR DESIGN PROJECT**

3 credits.

Engineering design projects supervised by faculty members.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 504 – ELECTRIC MACHINE & DRIVE SYSTEM LABORATORY**

2-3 credits.

Steady state and dynamic performance of electric machines in combination with power electronic converters. Parameter measurement, performance evaluation, design of experimental procedures for problem solving, use of digital data acquisition systems and signal processing equipment in system evaluation.

**Requisites:** E C E 711 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**E C E/COMP SCI 506 – SOFTWARE ENGINEERING**

3 credits.

Ideas and techniques for designing, developing, and modifying large software systems. Topics include software engineering processes; requirements and specifications; project team organization and management; software architectures; design patterns; testing and debugging; and cost and quality metrics and estimation. Students will work in large teams on a substantial programming project.

**Requisites:** (COMP SCI 367 or 400) and (COMP SCI 407, 536, 537, 545, 559, 564, 570, 679 or COMP SCI/E C E/COMP SCI 552) or graduate/professional standing, or declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 511 – THEORY AND CONTROL OF SYNCHRONOUS MACHINES**

3 credits.

The idealized three phase synchronous machine time domain model including saliency, time invariant form using Park's transformation, sudden short circuits and other transient conditions, reduced order models, excitation system and turbine/governor control, dynamics of multiple machine systems, transient stability and subsynchronous resonance.

**Requisites:** E C E 411 and 427, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**E C E 512 – POWER ELECTRONICS LABORATORY**

3 credits.

This laboratory introduces the student to measurement and simulation of important operating characteristics of power electronic circuits and power semiconductor devices. Emphasis is on devices, circuits, gating methods and power quality.

**Requisites:** E C E 412, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E/COMP SCI/ISY E 524 – INTRODUCTION TO OPTIMIZATION**

3 credits.

Introduction to mathematical optimization from a modeling and solution perspective. Formulation of applications as discrete and continuous optimization problems and equilibrium models. Survey and appropriate usage of basic algorithms, data and software tools, including modeling languages and subroutine libraries.

**Requisites:** (COMP SCI 200, 220, 300, 301, 302, 310, or placement into COMP SCI 300) and (MATH 320, 340, 341, or 375) or graduate/professional standing

**Course Designation:** Breadth - Natural Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/N E/PHYSICS 525 – INTRODUCTION TO PLASMAS**

3 credits.

Basic description of plasmas: collective phenomena and sheaths, collisional processes, single particle motions, fluid models, equilibria, waves, electromagnetic properties, instabilities, and introduction to kinetic theory and nonlinear processes. Examples from fusion, astrophysical and materials processing plasmas.

**Requisites:** (E C E 320 or PHYSICS 322), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/N E/PHYSICS 527 – PLASMA CONFINEMENT AND HEATING**

3 credits.

Principles of magnetic confinement and heating of plasmas for controlled thermonuclear fusion: magnetic field structures, single particle orbits, equilibrium, stability, collisions, transport, heating, modeling and diagnostics. Discussion of current leading confinement concepts: tokamaks, tandem mirrors, stellarators, reversed field pinches, etc.

**Requisites:** N E/PHYSICS/E C E/N E/PHYSICS 525, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/N E 528 – PLASMA PROCESSING AND TECHNOLOGY**

3 credits.

Introduction to basic understanding and techniques. Plasma processing of materials for semiconductors, polymers, plasma spray coatings, ion implantation, etching, arcs, extractive metallurgy and welding. Plasma and materials diagnostics.

**Requisites:** PHYSICS 322 or E C E 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E C E/COMP SCI/M E 532 – MATRIX METHODS IN MACHINE LEARNING**

3 credits.

Linear algebraic foundations of machine learning featuring real-world applications of matrix methods from classification and clustering to denoising and data analysis. Mathematical topics include: linear equations, regression, regularization, the singular value decomposition, and iterative algorithms. Machine learning topics include: the lasso, support vector machines, kernel methods, clustering, dictionary learning, neural networks, and deep learning. Previous exposure to numerical computing (e.g. Matlab, Python, Julia, R) required.

**Requisites:** (MATH 234, 320, 340, 341, or 375) and (E C E 203, COMP SCI 200, 220, 300, 301, 302, 310, 320, or placement into COMP SCI 300), graduate/professional standing, or declared in Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 533 – IMAGE PROCESSING**

3 credits.

Mathematical representation of continuous and digital images; models of image degradation; picture enhancement, restoration, segmentation, and coding; pattern recognition, tomography.

**Requisites:** E C E 330 and (MATH 320 or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 536 – INTEGRATED OPTICS AND OPTOELECTRONICS**

3 credits.

Characteristics of semiconductors; study of physical mechanisms and modeling of solid state electronic and photonic devices; principles of optoelectronic processing and examples of integrated optoelectronics.

**Requisites:** E C E 335 and (E C E 420 or 434), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 537 – COMMUNICATION NETWORKS**

3 credits.

Study of communication networks with focus on performance analysis. Layered network structure. Basic protocol functions such as addressing, multiplexing, routing, forwarding, flow control, error control, and congestion response. Overview of transport, network, and link layer protocol standards. Introduction to wireless and mobile networks.

**Requisites:** E C E 203 and (COMP SCI 400 or 367 prior to Fall 2018), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E/COMP SCI/M E 539 – INTRODUCTION TO ARTIFICIAL NEURAL NETWORKS**

3 credits.

Theory and applications of artificial neural networks: multi-layer perceptron, self-organization map, deep neural network, convolutional neural network, recurrent network, support vector machines, genetic algorithm, and evolution computing. Applications to control, pattern recognition, prediction, and object detection and tracking.

**Requisites:** COMP SCI 200, 220, 300, 301, 302, 310, placement into COMP SCI 300, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 541 – ANALOG MOS INTEGRATED CIRCUIT DESIGN**

3 credits.

Analysis, design and applications of modern analog circuits using integrated bipolar and field-effect transistor technologies. Provides the student with a working knowledge of the basic circuits used in modern analog integrated circuits and techniques for analysis and design.

**Requisites:** E C E 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**E C E 542 – INTRODUCTION TO MICROELECTROMECHANICAL SYSTEMS**

3 credits.

Introduction to MEMS technology, devices and systems. Fundamentals of MEMS in fabrication, process integration, material mechanics of MEMS structures, sensors and actuators. Main topics in MEMS - microfluidics, optical MEMS, RF MEMS, BioMEMS, packaging, and CAD.

**Requisites:** (E C E 335 or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**E C E 545 – ADVANCED MICROWAVE MEASUREMENTS FOR COMMUNICATIONS**

3 credits.

Measurements at VHF and microwave frequencies; characteristics of microwave generators, amplifiers, passive devices and detection systems; measurement of frequency, noise and simple antenna patterns; time domain reflectometry, swept frequency network and spectrum analyzer techniques; lecture and lab.

**Requisites:** (E C E 440 or 447), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**E C E/PHYSICS 546 – LASERS**

2-3 credits.

General principles of laser operation; laser oscillation conditions; optical resonators; methods of pumping lasers, gas discharge lasers, e-beam pumped lasers, solid state lasers, chemical lasers, and dye lasers; gain measurements with lasers; applications of lasers.

**Requisites:** (PHYSICS 322 or E C E 420) and (PHYSICS 449, 531, or 545), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**E C E 547 – ADVANCED COMMUNICATIONS CIRCUIT DESIGN**

3 credits.

Principles underlying the design of r.f. and microwave communications circuits. Analysis and design of wideband nonlinear power amplifiers, S-parameter techniques for r.f. active circuit design, computer aided design techniques, r.f. integrated circuits, fundamentals of low noise r.f. design.

**Requisites:** (E C E 420 or 447), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E C E 548 – INTEGRATED CIRCUIT DESIGN**

3 credits.

Bipolar and MOS devices in monolithic circuits. Device physics, fabrication technology. IC-design for linear and nonlinear circuitry.

**Requisites:** E C E 335, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 549 – INTEGRATED CIRCUIT FABRICATION LABORATORY**

3 credits.

Monolithic integrated circuit fabrication; mask making, photolithography, oxidation, diffusion, junction evaluation, metallization, packaging, and testing.

**Requisites:** (E C E 335 or 548), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 551 – DIGITAL SYSTEM DESIGN AND SYNTHESIS**

3 credits.

Introduction to the use of hardware description languages and automated synthesis in design. Advanced design principles. Verilog and VHDL description languages. Synthesis from hardware description languages. Timing-oriented synthesis. Relation of integrated circuit layout to timing-oriented design. Design for reuse.

**Requisites:** COMP SCI/E C E/COMP SCI 352, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 552 – INTRODUCTION TO COMPUTER ARCHITECTURE**

3 credits.

The design of computer systems and components. Processor design, instruction set design, and addressing; control structures and microprogramming; memory management, caches, and memory hierarchies; and interrupts and I/O structures. E C E 551 or knowledge of Verilog is recommended.

**Requisites:** (COMP SCI/E C E/COMP SCI 352 and COMP SCI/E C E/COMP SCI 354) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 553 – TESTING AND TESTABLE DESIGN OF DIGITAL SYSTEMS**

3 credits.

Faults and fault modeling, test equipment, test generation for combinational and sequential circuits, fault simulation, memory and microprocessor testing, design for testability, built-in self-test techniques, and fault location.

**Requisites:** COMP SCI/E C E/COMP SCI 352, E C E 353, and (COMP SCI 400 or 367 prior to Fall 2018), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 554 – DIGITAL ENGINEERING LABORATORY**

4 credits.

Practical aspects of computer system design. Design, construction, and testing of significant digital subsystems. Design, construction, and programming of pipelined digital computers.

**Requisites:** E C E 551 and COMP SCI/E C E/COMP SCI 552, not open to special students. Students with credit for E C E 453 or 454 may not enroll.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E 555 – DIGITAL CIRCUITS AND COMPONENTS**

3 credits.

Principles and characterization of logic circuits. Design and analysis techniques for applied logic circuits. Transmission lines in digital applications. Families of circuit logic currently in use and their characteristics.

**Requisites:** (COMP SCI/E C E/COMP SCI 352 and E C E 340), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E 556 – DESIGN AUTOMATION OF DIGITAL SYSTEMS**

3 credits.

Use of digital computers to simulate, partition, place and interconnect digital electronic systems.

**Requisites:** COMP SCI/E C E/COMP SCI 352 and (COMP SCI 300 or 367 prior to Fall 2018), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E C E/COMP SCI 561 – PROBABILITY AND INFORMATION THEORY IN MACHINE LEARNING**

3 credits.

Probabilistic tools for machine learning and analysis of real-world datasets. Introductory topics include classification, regression, probability theory, decision theory and quantifying information with entropy, relative entropy and mutual information. Additional topics include naive Bayes, probabilistic graphical models, discriminant analysis, logistic regression, expectation maximization, source coding and variational inference.

**Requisites:** (MATH 320, 340, 341, 375, or COMP SCI/E C E/M E/COMP SCI/E C E 532 or concurrent enrollment) and (E C E 331, MATH/STAT/MATH 309, 431, STAT 311, 324, STAT/M E/STAT 424 or MATH 531) or grad/profsnl standing or declared in Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E/ISYE 570 – ETHICS OF DATA FOR ENGINEERS**

3 credits.

Introduction to ethical issues in data engineering and principled solutions. Algorithmic fairness (individual fairness, group fairness, counterfactual fairness), differential privacy and its applications, and robustness. Builds on prior experience with machine learning/data science programming.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**E C E/M E 577 – AUTOMATIC CONTROLS LABORATORY**

4 credits.

Control theory is reduced to engineering practice through the analysis and design of actual systems in the laboratory. Experiments are conducted with modern servo systems using both analog and digital control. Systems identification and modern controls design are applied to motion and torque control.

**Requisites:** M E 346 or E C E 332, or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**E C E 600 – SEMINAR IN ELECTRICAL AND COMPUTER ENGINEERING**

0 credits.

Weekly or bi-weekly seminars on topics in electrical and computer engineering including automatic control, biomedical engineering, communications and signal processing, computer engineering, electromagnetic fields, energy and power systems, photonics, plasma, and solid state. Seminar on a particular topic may include lectures given by faculty, invited speakers, as well as group discussion.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**E C E 601 – SPECIAL TOPICS IN ELECTRICAL AND COMPUTER ENGINEERING**

1-4 credits.

Advanced topics of special interest to students in various areas of Electrical and Computer Engineering.

**Requisites:** Junior standing or member of Engineering Guest Students**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E C E 610 – SEMINAR IN ELECTRICAL AND COMPUTER ENGINEERING**

1 credit.

Survey of topics within the department of electrical and computer engineering that introduce students to the materials/techniques to assist them in being successful graduate students. Faculty seminars spanning energy and power systems, applied physics, electromagnetic fields, plasmas, communications and signal processing, controls, photonics, solid state, and computers will be given. Additionally, students will participate in weekly group exercises to enhance their skills in engineering/technical communications, writing, ethics, and project management.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 611 – INTRODUCTION TO DOCTORAL RESEARCH IN ELECTRICAL & COMPUTER ENGINEERING**

2 credits.

A focus on topics within the department of electrical and computer engineering that introduce students to the materials/techniques that will assist them in being successful graduate students. Faculty seminars spanning energy and power systems, applied physics, electromagnetic fields, plasmas, communications and signal processing, controls, photonics, solid state, and computers will be given. Additionally, students will participate in weekly group exercises to enhance their skills in engineering/technical communications, writing, ethics, and project management. Graded homework and a final project are assigned.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/MATH 641 – INTRODUCTION TO ERROR-CORRECTING CODES**

3 credits.

Coding theory. Codes (linear, Hamming, Golay, dual); decoding-encoding; Shannon's theorem; sphere-packing; singleton and Gilbert-Varshamov bounds; weight enumerators; MacWilliams identities; finite fields; other codes (Reed-Muller, cyclic, BCH, Reed-Solomon) and error-correction algorithms.

**Requisites:** MATH 541 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2017**E C E 697 – CAPSTONE PROJECT IN MACHINE LEARNING AND SIGNAL PROCESSING**

5 credits.

Individual or team project to gain hands-on-experience applying machine learning and signal processing concepts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**E C E 699 – ADVANCED INDEPENDENT STUDY**

1-6 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E C E 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**E C E/COMP SCI 707 – MOBILE AND WIRELESS NETWORKING**

3 credits.

Design and implementation of protocols, systems, and applications for mobile and wireless networking, particularly at the media access control, network, transport, and application layers. Focus is on the unique problems and challenges presented by the properties of wireless transmission, various device constraints such as limited battery power, and node mobility. Knower of computer networking is strongly encouraged, such as from COMP SCI 640 or E C E 537.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 711 – DYNAMICS AND CONTROL OF AC DRIVES**

3 credits.

Principles of power converters, two axis models of AC machines and AC drives, simulation of drive systems, analytical modeling of drives, dynamic behavior of induction and synchronous motors and drive systems.

**Requisites:** E C E 411 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 712 – SOLID STATE POWER CONVERSION**

3 credits.

Advanced course in power electronics which provides an understanding of switching power converters. Included are DC-to-DC, AC-to-DC, DC-to-AC, and AC-to-AC converters, commutation techniques, converter control, interfacing converters with real sources and loads.

**Requisites:** E C E 412 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 713 – ELECTROMAGNETIC DESIGN OF AC MACHINES**

3 credits.

Electromagnetic design concepts and application to AC machines, magnetic circuit concepts, calculation of equivalent circuit parameters of induction, synchronous and permanent magnet machines from geometric data, copper and iron loss calculations, theory and application of finite elements to electromagnetic devices.

**Requisites:** (E C E 411 or 511) and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 714 – UTILITY APPLICATION OF POWER ELECTRONICS**

3 credits.

Power electronic application to utility systems is a rapidly growing field with major impact on the industry. Covers material on HVDC transmission, energy storage systems, renewable sources, static compensators, and flexible ac transmission systems.

**Requisites:** E C E 412, 427, and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 717 – LINEAR SYSTEMS**

3 credits.

Equilibrium points and linearization; natural and forced response of state equations; system equivalence and Jordan form; Lyapunov, asymptotic, and BIBO stability; controllability and duality; control-theoretic concepts such as pole-placement, stabilization, observers, dynamic compensation, and the separation principle. Knowledge of linear algebra [such as MATH 340] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 719 – OPTIMAL SYSTEMS**

3 credits.

Optimality considerations in the study of dynamical systems; applications to electrical systems gain selection, tuning, conditions for optimality, feedback and instability, iterative methods, filtering, prediction, smoothing, dynamic programming controller synthesis, stability and robustness criteria. Knowledge of State Space System Analysis [such as E C E 334] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**E C E 723 – ON-LINE CONTROL OF POWER SYSTEMS**

3 credits.

State estimation based on line-flow measurements. Detection and correction of incorrect on-line measurements. Reduction techniques. Network security evaluation. On-line contingency studies and contingency remedial action. Calculation of penalty factors and optimal power dispatch strategies. On-line stability determination. Parallel processors for on-line studies. Knowledge of basic probability analysis [such as E C E 331, STAT/ MATH 431, or STAT 311] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**E C E/N E/PHYSICS 724 – WAVES AND INSTABILITIES IN PLASMAS**

3 credits.

Waves in a cold plasma, wave-plasma interactions, waves in a hot plasma, Landau damping, cyclotron damping, magneto-hydrodynamic equilibria and instabilities, microinstabilities, introduction to nonlinear processes, and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E/N E/PHYSICS 725 – PLASMA KINETIC THEORY AND RADIATION PROCESSES**

3 credits.

Coulomb Collisions, Boltzmann equation, Fokker-Planck methods, dynamical friction, neoclassical diffusion, collision operators radiation processes and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/N E/PHYSICS 726 – PLASMA MAGNETOHYDRODYNAMICS**

3 credits.

MHD equations and validity in hot plasmas; magnetic structure and magnetic flux coordinates; equilibrium in various configurations; stability formulation, energy principle, classification of instabilities; ideal and resistive instability in various configurations, evolution of nonlinear tearing modes; force-free equilibria, helicity, MHD dynamo; experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 729 – INFORMATION THEORY**

3 credits.

Definition of measures of information and their properties, capacity of discrete and continuous channels with noise, source and channel coding theorems, fundamentals of channel coding, noiseless source coding, and source coding with a fidelity criterion. Knowledge of basic probability analysis [such as E C E 331, STAT/MATH 431, or STAT 311] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 730 – PROBABILITY AND RANDOM PROCESSES**

3 credits.

Review of basic probability. Advanced probability concepts. Random vectors; linear filtering of random processes; stationarity; power spectral densities; estimation; convergence; Markov chains; Poisson process; Wiener process. Knowledge of basic probability analysis [such as E C E 331, STAT/MATH 431, or STAT 311] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 731 – ADVANCED POWER SYSTEM ANALYSIS**

3 credits.

Electrical transients due to faults and switching. Effect on power system design and operation. Traveling waves and surge protection. Computerized analysis of power transients.

**Requisites:** E C E 427 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**E C E 734 – VLSI ARRAY STRUCTURES FOR DIGITAL SIGNAL PROCESSING**

3 credits.

An overview of the architectures and design methodologies of VLSI array processors for digital signal processing. Emphasis is placed on the techniques of mapping algorithms onto array structures for real time signal processing. Knowledge of digital signal processing [such as E C E 431] and computer architecture [such as E C E/COMP SCI 552] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 735 – SIGNAL SYNTHESIS AND RECOVERY TECHNIQUES**

3 credits.

Signals and their representation. Signal synthesis subject to constraints on peak voltage, energy, duration-bandwidth product. The theory of alternating projections onto convex sets and applications to inverse problems in signal processing: signal recovery using incomplete data, image recovery in tomography using limited views, phase retrieval in optical astronomy.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020

**E C E 736 – WIRELESS COMMUNICATIONS**

3 credits.

Theory, design and analysis of mobile wireless communication systems from a signal processing perspective. Emphasis on code-division multiple-access (CDMA) systems employing direct-sequence spread-spectrum (DS-SS) signaling. Topics include characterization of mobile wireless channels, demodulation of DS-SS signals, diversity techniques, interference suppression methods, and low-complexity adaptive receivers. Knowledge of probability [such as E C E 730] and digital communication [such as E C E 437] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 738 – ADVANCED DIGITAL IMAGE PROCESSING**

3 credits.

Deterministic and stochastic spatio-temporal image models, transform domain processing, Markov random fields and anisotropic diffusion; MAP parameter estimation, ill-posed inverse problems, robust statistics and non-linear digital filtering in image processing. Applications to image restoration, motion estimation, (video) image compression (MPEG, JPEG) and tomography. Knowledge of image processing [such as E C E/COMP SCI 533] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/M E 739 – KINEMATICS, DYNAMICS, AND CONTROL OF ROBOTIC MANIPULATORS**

3 credits.

Robotics analysis and design, focusing on the analytical fundamentals specific to robotic manipulators. Serial chain robotic manipulator forward and inverse kinematics, differential kinematics, dynamics, motion planning, and controls. Knowledge of linear algebra [such as MATH 320], high-level computational programming language such as MATLAB, and system dynamics [such as M E 340] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 740 – ELECTROMAGNETIC THEORY**

3 credits.

Time harmonic fields and waves in linear media with applications to radiation, guiding and scattering; wave and surface impedance and admittance concepts; duality, uniqueness, image theory, equivalence principle, induction and compensation theorems, reciprocity, Green's functions, wave functions, potential and transform theory. Knowledge of electromagnetics [such as E C E 420] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 741 – SEMICONDUCTOR DIODE LASERS AND OTHER OPTOELECTRONIC DEVICES**

3 credits.

An overview of modern photonic technology and an introduction to key parameters and concepts; the basic mechanisms determining the relationship between optical gain and current density, and quantum-well laser structures; physics of high-power phase-locked laser arrays or other optoelectronics devices. Knowledge of electromagnetics [such as E C E 320] and solid-state electronics [such as E C E 335] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**E C E 742 – COMPUTATIONAL METHODS IN ELECTROMAGNETICS**

3 credits.

Computational techniques for solving differential and integral equations that govern static, frequency-domain, and time-domain electromagnetic field phenomena. Applications of the finite-difference time-domain method, finite-element method, and method of moments to practical electromagnetics engineering problems. Knowledge of high-level programming language like MATLAB strongly encouraged. Knowledge of electromagnetics [such as E C E 320] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 743 – HIGH-POWER DIODE LASERS AND AMPLIFIERS**

3 credits.

Single-mode diode lasers and amplifiers and their applications; an in-depth treatment of the four basic types of high-power coherent diodes: phase-locked arrays, master-oscillator power amplifiers, unstable resonators, and external-cavity-controlled resonators. Knowledge of electromagnetics [such as E C E 320] and solid-state electronics [such as E C E 335] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**E C E 744 – THEORY OF MICROWAVE CIRCUITS AND DEVICES**

3 credits.

Scattering matrices; symmetrical junctions; impedance and ABCD matrices; equivalent circuits. Wave propagation in periodic structures and anisotropic media; Floquet's theorem; Brillouin diagrams; Hartree harmonics; tensor permeability, conductivity, and permittivity; coupled wave equations; normal modes; applications in ferrite devices. Knowledge of advanced engineering electromagnetics [such as E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**E C E 745 – SOLID STATE ELECTRONICS**

3 credits.

Physical principles underlying the action of semiconductor devices, chemical bonding and energy band structure, Boltzmann transport theory, optical and high frequency effects, diffusion and drift, interfaces, properties of elemental and compound semiconductors.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/PHYSICS 746 – QUANTUM ELECTRONICS**

3 credits.

Elementary aspects of Lagrange theory of fields and field quantization; Bose, Fermi and Pauli operators; interaction of fields; quantum theory of damping and fluctuations; applications to lasers, nonlinear optics, and quantum optics. Knowledge of lasers [such as PHYSICS/E C E 546] and graduate-level electromagnetics [such as E C E 740 or PHYSICS 721] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 747 – NANOPHOTONICS**

3 credits.

Optics/photonics at nanometer and micrometer length scales, including EM waves in dielectrics and metals, computational electromagnetics, waveguides and waveguide coupling, optical resonators, basic nanofabrication techniques, thin-film interference, surface-plasmon polaritons, localized surface-plasmon resonances, applications of plasmonics, super-resolution imaging, photonic crystals, composite materials and metamaterials, metasurfaces. Knowledge of Maxwell's equation and basic ray/wave optics, as would typically be obtained from junior-level or higher electromagnetics or optics courses [such as E C E 320 or E C E 434], is strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/PHYSICS 748 – LINEAR WAVES**

3 credits.

General considerations of linear wave phenomena; one dimensional waves; two and three dimensional waves; wave equations with constant coefficients; inhomogeneous media; random media. Lagrangian and Hamiltonian formulations; asymptotic methods. Knowledge of electromagnetics [such as E C E 320 or PHYSICS 321], mechanics [such as M E 340], or vibrations [such as M E 440] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/N E/PHYSICS 749 – COHERENT GENERATION AND PARTICLE BEAMS**

3 credits.

Fundamental theory and recent advances in coherent radiation charged particle beam sources (microwave to X-ray wavelengths) including free electron lasers, wiggler/wave-particle dynamics, Cerenkov masers, gyrotrons, coherent gain and efficiency, spontaneous emission, beam sources and quality, related accelerator concepts experimental results and applications.

**Requisites:** E C E 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**E C E/COMP SCI 750 – REAL-TIME COMPUTING SYSTEMS**

3 credits.

Introduction to the unique issues in the design and analysis of computer systems for real-time applications. Hardware and software support for guaranteeing timeliness with and without failures. Resource management, time-constrained communication, scheduling and imprecise computations, real-time kernels and case studies. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552) and operating system functions (e.g., COMP SCI 537)

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**E C E 751 – EMBEDDED COMPUTING SYSTEMS**

3 credits.

Embedded applications, embedded processors and multiprocessors, embedded system design and simulation, configurable/reconfigurable embedded systems, embedded compilers and tool chains, run-time systems, application design and customization, hardware and software co-design, low-power design. Knowledge of computer architecture [such as E C E 552] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/COMP SCI 752 – ADVANCED COMPUTER ARCHITECTURE I**

3 credits.

Processor design, computer arithmetic, pipelining, multi-operation processors, vector processors, control units, precise interrupts, main memory, cache memories, instruction set design, stack machines, busses and I/O, protection and security. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**E C E 753 – FAULT-TOLERANT COMPUTING**

3 credits.

Fault modeling, redundancy techniques and reliability evaluation, error detecting and correcting codes, self-checking circuits, fault diagnosis, software fault tolerance, and case studies. Knowledge of probability [such as E C E 431] and computer architecture [such as E C E/COMP SCI 552] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/COMP SCI 755 – VLSI SYSTEMS DESIGN**

3 credits.

Overview of MOS devices and circuits; introduction to integrated circuit fabrication; topological design of data flow and control; interactive graphics layout; circuit simulation; system timing; organizational and architectural considerations; alternative implementation approaches; design project. E C E 555 or equivalent experience is strongly recommended.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/COMP SCI 756 – COMPUTER-AIDED DESIGN FOR VLSI**

3 credits.

Broad introduction to computer-aided design tools for VLSI, emphasizing implementation algorithms and data structures. Topics covered: design styles, layout editors, symbolic compaction, module generators, placement and routing, automatic synthesis, design-rule checking, circuit extraction, simulation and verification. Students are strongly encourage to have programming skills and to have taken a course in Digital System Fundamentals such as E C E/COMP SCI 352.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**E C E/COMP SCI 757 – ADVANCED COMPUTER ARCHITECTURE II**

3 credits.

Parallel algorithms, principles of parallelism detection and vectorizing compilers, interconnection networks, MIMD machines, processor synchronization, data coherence, multis, dataflow machines, special purpose processors. Students are strongly encouraged to have knowledge of computer architecture (e.g., E C E/COMP SCI 552).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/COMP SCI/E M A/E P/M E 759 – HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of hardware and software solutions that enable the use of advanced computing in tackling computationally intensive Engineering problems. Hands-on learning promoted through programming assignments that leverage emerging hardware architectures and use parallel computing programming languages. Students are strongly encourage to have completed COMP SCI 367 or COMP SCI 400 or to have equivalent experience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/COMP SCI 760 – MACHINE LEARNING**

3 credits.

Computational approaches to learning: including inductive inference, explanation-based learning, analogical learning, connectionism, and formal models. What it means to learn. Algorithms for learning. Comparison and evaluation of learning algorithms. Cognitive modeling and relevant psychological results.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/COMP SCI 761 – MATHEMATICAL FOUNDATIONS OF MACHINE LEARNING**

3 credits.

Mathematical foundations of machine learning theory and algorithms. Probabilistic, algebraic, and geometric models and representations of data, mathematical analysis of state-of-the-art learning algorithms and optimization methods, and applications of machine learning. Students should have taken a course in statistics and a course in linear algebra (e.g., STAT 302 and MATH 341).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E/CBE/MATH 777 – NONLINEAR DYNAMICS, BIFURCATIONS AND CHAOS**

3 credits.

Advanced interdisciplinary introduction to qualitative and geometric methods for dissipative nonlinear dynamical systems. Local bifurcations of ordinary differential equations and maps. Chaotic attractors, horseshoes and detection of chaos.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016



**E C E/B M E/MED PHYS 778 – MACHINE LEARNING IN ULTRASOUND IMAGING**

3 credits.

Concepts and machine learning techniques for ultrasound beamforming for image formation and reconstruction to image analysis and interpretation will be presented. Key machine learning and deep learning concepts applied to beamforming, compressed sampling, speckle reduction, segmentation, photoacoustics, and elasticity imaging will be evaluated utilizing current peer-reviewed publications.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E/COMP SCI 782 – ADVANCED COMPUTER SECURITY AND PRIVACY**

3 credits.

Security and privacy issues in software, networks, and hardware systems. Security vulnerabilities, privacy threats, threats modeling, and mitigation strategies. Privacy issues related to user interaction with devices, online systems, and networks. In addition, a selection of more advanced topics will be covered. Possible examples include applied cryptography in the context of systems, security and privacy policies, user authentication, and cyber-physical systems. Builds on prior experiences with one or more of the following: networking, security, modern machine learning, embedded systems, and mobile computing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 790 – MASTER'S RESEARCH**

1-9 credits.

Independent work on master's research overseen by a qualified instructor.

**Requisites:** Declared in Electrical Engineering: Research, M.S. or Electrical Engineering: Power Engineering, M.S.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E C E 817 – NONLINEAR SYSTEMS**

3 credits.

Modelling nonlinear systems, linearization, equilibria, solution concepts, phase plane analysis, stability concepts, Lyapunov methods, oscillations, vector space methods, control system nonlinearities and design. Selected topics from the following: input-output methods, switching and variable structure systems, feedback linearization, and Lyapunov robustness. Knowledge of linear systems [such as E C E 717] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E C E 821 – OPTIMAL CONTROL AND VARIATIONAL METHODS**

3 credits.

Variational principles in optimization and optimal control, constrained control and reachability analysis, stability of optimal control, data-driven methods for optimal control. Knowledge of linear systems [such as E C E 717] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E C E 826 – THEORETICAL FOUNDATIONS OF LARGE-SCALE MACHINE LEARNING**

3 credits.

Mathematical foundations of large-scale machine learning and optimization. Focus on recent texts in machine learning, optimization, and randomized algorithms, focused on tradeoffs that are driving algorithmic design in this new discipline. These trade-offs revolve around speed of convergence, statistical accuracy, robustness, scalability, algorithmic complexity, and implementation.

**Requisites:** E C E/COMP SCI/E C E 761**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E C E 830 – ESTIMATION AND DECISION THEORY**

3 credits.

Estimation and decision theory applied to random processes and signals in noise: Bayesian, maximum likelihood, and least squares estimation; the Kalman filter; maximum likelihood and maximum a posteriori detection; adaptive receivers for channels with unknown parameters or dispersive, fading characteristics; the RAKE receiver; detection systems with learning features.

**Requisites:** E C E 730**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**E C E 841 – ANTENNAS**

3 credits.

Applications of Maxwell's field equations to radiation problems; transmission of radio waves; radiation and impedance characteristics of various antennas and arrays. Analysis of complete antenna systems.

**Requisites:** E C E 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**E C E/MATH 842 – TOPICS IN APPLIED ALGEBRA**

3 credits.

Applied topics with emphasis on algebraic constructions and structures. Examples include: algebraic coding theory; codes (algebraic-geometric, convolutional, low-density-parity-check, space-time); curve and lattice based cryptography; watermarking; computer vision (face recognition, multiview geometry).

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**E C E 845 – TRANSPORT IN SEMICONDUCTOR DEVICES**

3 credits.

Transport of carriers in electronic devices, starting from the Boltzmann equation and the quantum mechanical treatment of scattering, and covering applications to devices; transport in 2D structures; modeling of transport; experiments and devices involving hot electrons.

**Requisites:** E C E 745

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E C E/PHYSICS 848 – NONLINEAR WAVES**

3 credits.

General considerations of nonlinear wave phenomena; nonlinear hyperbolic waves; nonlinear dispersion; nonlinear geometrical optics; Whitham's variational theory; nonlinear and parametric instabilities; solitary waves; inverse scattering method. Knowledge of electromagnetics [such as E C E 320 or PHYSICS 321] or mechanics [such as M E 340] encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**E C E/COMP SCI/STAT 861 – THEORETICAL FOUNDATIONS OF MACHINE LEARNING**

3 credits.

Advanced mathematical theory and methods of machine learning. Statistical learning theory, Vapnik-Chevronenkis Theory, model selection, high-dimensional models, nonparametric methods, probabilistic analysis, optimization, learning paradigms.

**Requisites:** COMP SCI/E C E/COMP SCI 761 or E C E 830

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E C E/MATH/STAT 888 – TOPICS IN MATHEMATICAL DATA SCIENCE**

1-3 credits.

Advanced topics in the mathematical foundations of data science

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Independent work on doctoral research overseen by a qualified instructor.

**Requisites:** Declared in Electrical Engineering PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 901 – SPECIAL TOPICS IN ELECTRICAL AND COMPUTER ENGINEERING**

1-3 credits.

Special advanced topics across Electrical and Computer Engineering. The topics covered, instructors, and prerequisites all vary with semester and with section. Particular topics typically reflect state-of-the-art ideas and research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E/N E/PHYSICS 922 – SEMINAR IN PLASMA PHYSICS**

0-1 credits.

Current topics in plasma physics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 990 – DISSERTATOR'S RESEARCH**

1-12 credits.

Independent work on dissertation overseen by a qualified instructor.

**Requisites:** Declared in Electrical Engineering PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E C E 999 – ADVANCED INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## EMERGENCY MEDICINE (EMER MED)

**EMER MED 699 – INDEPENDENT STUDY**

1-4 credits.

Offers undergraduates majoring in related fields an opportunity to participate in basic emergency medicine research. Assists in the preparation for graduate or medical school coursework.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**EMER MED 909 – EMERGENCY MEDICINE INTERNSHIP PREP COURSE**

1 credit.

Designed to highlight, review, and allow practice of key concepts in Emergency Medicine. Practice with case simulation, case discussion, didactics, panel discussions, and procedural skills to prepare for success in the first few weeks of an Emergency Medicine residency. Will lead and participate in simulations. Explore critical interplay between medical care and communication. Discuss common challenges encountered early in residency and throughout an EM career, and develop individualized plans to address these challenges.

**Requisites:** MED SCI-M 810, 811, 812, 813, and EMER MED 961**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 911 – INTRODUCTION TO PREHOSPITAL MEDICINE AND DETERMINANTS OF UTILIZATION OF THE PREHOSPITAL SYSTEM**

2 credits.

Provides a unique opportunity for fourth year medical students to gain experience in the prehospital system while utilizing their public health knowledge to determine factors that lead to patient utilization of this system. During this course, students will gain understanding of the prehospital system through first-hand experience with prehospital providers while appreciating the environment in which their patients live and work. Students will be asked to observe patient care, conduct posttransport interviews in the emergency department, and examine the social and environmental determinants that led to activation of the prehospital system.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 912 – GUATEMALA HEALTH ADVANCED ELECTIVE**

2 credits.

Builds on the skills students developed during the Guatemala Service Learning experience in their first-year. The Service Learning trip partners with the San Lucas Mission to provide traveling health clinics around the southern/eastern sides of Lake Atitlan. In this selective, students will take a leadership role in the Service Learning Trip. Course is intended for M4 or Phase 3 medical students who have participated in the Guatemala Service Learning Experience. Students should have intermediate Spanish-language skills. Exceptions to these requirements will be considered on a case-by-case basis by Clerkship Director.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**EMER MED 913 – GUATEMALA PUBLIC HEALTH FIELD PROJECT**

2 credits.

Design and implement a public health field project in the community of San Lucas Tolimán, Guatemala. This project will fulfill the field project for students on the path of distinction in public health or the dual MD-MPH program. In participating in the Guatemala service learning experience, students will have provided traveling health clinics to indigenous Mayan populations in rural Guatemala, collaborating with the San Lucas Mission. Course is intended for M4 or Phase 3 medical students who have participated in the Guatemala Service Learning Experience. Students should have intermediate Spanish-language skills. Exceptions to these requirements will be considered on a case-by-case basis by Clerkship Director.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**EMER MED 914 – WILDERNESS MEDICINE**

2 credits.

Complete an Advanced Wilderness Life Support Course, which will cover topics such as Altitude Illnesses, Hyper- and Hypothermia, Toxicology, Envenomations, general trauma, and more, through lectures, skills sessions, and simulation. Focus on medical decision-making that can be executed early in disease or injury processes, in austere environments, with a focus on acute stabilization and evacuation to appropriate medical care. Learn foundational backcountry skills such as land navigation; fire and stove operation; water and waste management; and Leave-No-Trace principles. Technical workshops and field experiences give participants the opportunity to learn from experienced kayakers and climbers from the area, to apply backcountry skills on a self-supported backpacking trip, and to continue exploring wilderness medicine through interactive sessions.

**Requisites:** MED SCI-M 810, 811, 812 and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

**EMER MED 919 – INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN EMERGENCY MEDICINE**

2-4 credits.

Care for emergency medicine patients in the Emergency Department. Participate in multidisciplinary work to transition patients to the next level of care. Evaluate and manage patients requiring collaboration with consulting specialties. Complete other patient care related learning activities as assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, attending physician, and clinical site.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**EMER MED 920 – ART AND SCIENCE OF RESUSCITATION**

2 credits.

Gain comfort with necessary skills in leadership and communication to effectively run a resuscitation and to review the basic science, which guide the principles of resuscitation of a variety of critical-illness disease states. Students will first attain ACLS certification via AHA approved curriculum, followed by in-depth reviews of skills and underlying basic science behind the creation of ACLS guidelines. In addition to hands-on skills such as CPR, BVM respiration, I/O access, and airway management, simulation will be utilized to teach advanced skills in leadership, teamwork, and communication, which are integral to success in running ACLS-based resuscitation's. Crisis-Resource Management skills will be introduced and practiced in a variety simulated resuscitation scenarios, with students having the opportunity to practice various roles, including leading a code team.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 930 – WILDERNESS MEDICINE**

1 credit.

Introduces students to the epidemiology, pathophysiology and clinical practice of Wilderness Medicine: the care of patients in remote environments lacking typical health care resources, often under harsh conditions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 958 – INTRODUCTION TO BEDSIDE ULTRASOUND ELECTIVE**

2 credits.

Focus on learning and practicing skills in clinical ultrasound (US) in the Emergency Department setting, under direct supervision by Emergency Medicine faculty. Receive teaching in core clinical US skills including evaluation of the aorta, echocardiography, gallbladder, renal, inferior vena cava, female pelvis, FAST, deep vein thrombosis, ocular, and lung exams. Complete hands-on scanning with ultrasound-trained faculty focusing on the above areas of expertise.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 959 – EMERGENCY MEDICINE REGIONAL SITE**

2-4 credits.

Learn and gain clinical experience in the Emergency Department setting.

Evaluate and care for the full spectrum of Emergency Department patients under the guidance and supervision of Emergency Medicine attending physicians.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**EMER MED 960 – BASIC EMERGENCY MEDICINE (EM) ELECTIVE**

2 credits.

Learn and gain clinical experience in the Emergency Department setting.

Evaluate and care for the full spectrum of Emergency Department patients primarily and autonomously under the guidance and supervision of Emergency Medicine Attendings.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**EMER MED 961 – ADVANCED EM ELECTIVE**

4 credits.

Learn and gain clinical experience in the Emergency Department setting.

Evaluate and care for the full spectrum of Emergency Department patients primarily and autonomously under the guidance and supervision of Emergency Medicine Attendings.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**EMER MED 998 – INDEPENDENT STUDY**

1-8 credits.

Offers MD students interested in emergency medicine an opportunity to participate in advanced and translational research. Expands basic research knowledge and exposes MD students to current advanced research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## ENGINEERING MECHANICS AND AEROSPACE ENGINEERING (E M A)

**E M A 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career in industry.

**Requisites:** Sophomore standing only

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E M A 103 – PRINCIPLES OF ENGINEERING FROM THE RENAISSANCE TO MODERN TIMES**

3 credits.

Engineering achievements of the Renaissance period and their relation to modern engineering practice, key principles developed, and errors in understanding of that time. Innovative work of notable figures such as Galileo Galilei and Leonardo da Vinci and their contributions to fundamental mechanics principles of engineering, traced through modern engineering practice and current engineering applications. Introduction to concepts of stress, strain, tension, compression, deflection of beams, flaws, and fracture. Not for engineering majors.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**E M A 105 – INTRODUCTION TO UNMANNED AIRCRAFT SYSTEMS**

3 credits.

Prepares students to operate Unmanned Aircraft Systems (UAS) for commercial purposes. Focuses on remote sensing, automation / artificial intelligence, data analytics and business applications / opportunities for UAS. Teaches all applicable subjects and provides hands-on experience necessary to 1) safely, legally and ethically operate UAS for commercial purposes; 2) effectively apply UAS to solve business problems and 3) manage, process and analyze data collected via UAS. Optional Federal Aviation Administration exam for a remote pilot-in-command (RPIC) certification. Group projects involving real-world drone flights to collect data and produce commercially viable products.

**Requisites:** None

**Repeatable for Credit:** No

**E M A 201 – STATICS**

3 credits.

Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of areas, and friction.

**Requisites:** (MATH 222, 276, or concurrent enrollment), or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 202 – DYNAMICS**

3 credits.

Kinematics, force-mass-acceleration relations, work and energy, impulse and momentum, moments of inertia and mass.

**Requisites:** E M A 201 or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 291 – PROJECTS IN ENGINEERING MECHANICS & ASTRONAUTICS**

1-3 credits.

Individual engineering projects under staff supervision.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**E M A 303 – MECHANICS OF MATERIALS**

3 credits.

Stress and strain, torsion, bending of beams, shearing stresses in beams, compound stresses, principal stresses, deflections of beams, statically indeterminate members, columns. For civil engineers.

**Requisites:** E M A 201 and (MATH 222 or 276), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/M E 307 – MECHANICS OF MATERIALS LAB**

1 credit.

Data processing, tension/compression tests, creep stress concentrations, fatigue, fracture, composite materials, combined stress, beam flexure, dynamic loads, buckling.

**Requisites:** (M E 306, E M A 303 or concurrent enrollment) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/CIV ENGR 395 – MATERIALS FOR CONSTRUCTED FACILITIES**

3 credits.

Properties and tests of materials used in the initial construction or repair of facilities (including buildings, transportation systems, utility systems, and reinforced earth). Introduction to laboratory and field measurement techniques to assess material performance capabilities. Technical report preparation.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 405 – PRACTICUM IN FINITE ELEMENTS**

3 credits.

Use of finite elements (FE) for solving practical problems in mechanics. Elementary theory of FE is discussed. A commercial computer program is used for applications. Major emphasis is on behavior of FE, modeling, and evaluation of results for correctness.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 469 – DESIGN PROBLEMS IN ENGINEERING**

3 credits.

The design philosophy is presented. Students will be required to apply their knowledge of elementary mechanics, engineering and basic science to arrive at acceptable solutions to a variety of design problems.

**Requisites:** Declared in Engineering Mechanics and (E M A 303 or M E 306)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A/E P 471 – INTERMEDIATE PROBLEM SOLVING FOR ENGINEERS**

3 credits.

Use of computational tools for the solution of problems encountered in engineering physics applications. Topics covered include orbital mechanics, structural vibrations, beam and plate deformations, heat transfer, neutron diffusion, and criticality. Emphasis will be on modeling, choice of appropriate algorithms, and model validation.

**Requisites:** (MATH 319, 320 or 375) and (E P 271 or COMP SCI 310), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/E P 476 – INTRODUCTION TO SCIENTIFIC COMPUTING FOR ENGINEERING PHYSICS**

3 credits.

Background for professional numerical computation in Linux environments begins with shell scripting and software archiving. Programming skills in a compiled language are then developed through scientific and engineering examples. Engineering problem-solving skills are reinforced through applications that require numerical solutions to systems of differential and/or integral equations, while motivating progressively more advanced computational methods.

**Requisites:** (E P 271, COMP SCI 300, or 310) and (MATH 319, 320, or 375), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E M A 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate research and senior honors thesis in engineering mechanics and astronautics.

**Requisites:** Declared in Engineering Mechanics Honors in Research

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2009

**E M A 506 – ADVANCED MECHANICS OF MATERIALS I**

3 credits.

Analysis and design of load-carrying members, shear center, unsymmetrical bending, curved beams, beams on elastic foundations, energy methods, theories of failure, thick-walled cylinders, stress concentrations, design to prevent failure by excessive elastic deformation, plastic deformation and fracture.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A/CIV ENGR/M E 508 – COMPOSITE MATERIALS**

3 credits.

Physical properties and mechanical behavior of polymer, metal, ceramic, cementitious, cellulosic and biological composite systems; micro- and macro-mechanics; lamination and strength analyses; static and transient loading; fabrication; recycling; design; analytical-experimental correlation; applications.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 519 – FRACTURE MECHANICS**

3 credits.

Introduction to the mechanics of fracture of linear and nonlinear materials. Crack stress and deformation fields; stress intensity factors; crack tip plastic zone; fracture toughness testing; energy release rate; J-integral. Criteria for crack growth initiation/stability; application to design.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 521 – AERODYNAMICS**

3 credits.

Potential flow theory; stream functions; vortex filaments and sheets. Two- and three-dimensional wing theory. Doublet and panels methods. Propeller theory.

**Requisites:** (E M A 202, M E 240, or PHYSICS 311) and (CIV ENGR 310 or M E 363), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A 522 – AERODYNAMICS LAB**

3 credits.

Experimental methods for aerodynamic measurements: wind tunnel tests with 6-component sting balance, pitot probe, hot wire anemometer; flow visualization with smoke generator and laser sheet; digital data acquisition; practical considerations for experimental design. Methods for comparing theoretical predictions to experimental measurements and computational simulations.

**Requisites:** E M A 521, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 523 – FLIGHT DYNAMICS AND CONTROL**

3 credits.

Aircraft longitudinal and lateral static stability. Aircraft equations of motion. Stability derivatives. Longitudinal and lateral dynamic stability of uncontrolled motion. Open-loop aircraft control. Closed-loop aircraft control.

**Requisites:** E M A 521 and 542, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 524 – ROCKET PROPULSION**

3 credits.

Rocket performance. One dimensional gasdynamics. Thrust chambers, nozzle design criteria. Fundamentals of combustion. Rocket configurations.

**Requisites:** M E 363, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A/M E 540 – EXPERIMENTAL VIBRATION AND DYNAMIC SYSTEM ANALYSIS**

3 credits.

Application of digital data acquisition to the investigation of mechanical components, structures and systems using time histories, transforms and response functions to characterize free, forced and transient inputs. Introduction to sensors, instrumentation and methods appropriate for dynamic system response.

**Requisites:** (M E 440, E M A 545, or concurrent enrollment) or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



### **E M A/M S & E 541 – HETEROGENEOUS AND MULTIPHASE MATERIALS**

3 credits.

Principles of the mechanics of solid multiphase systems. Role of heterogeneity and anisotropy in determining physical properties including elastic, dielectric and piezoelectric properties. Applications in lightweight structures, ultrastrong materials, materials for protection of the body, and materials for the replacement of human tissues. Materials with fibrous, lamellar, particular, and cellular structures. Heterogeneous materials of biological origin. Biomimetic and bio-inspired materials.

**Requisites:** E M A 303, M E 306, or M S & E 441, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **E M A 542 – ADVANCED DYNAMICS**

3 credits.

Kinematics and kinetics of plane and three-dimensional motion, Coriolis acceleration, general methods of linear and angular momentum, central force motion, gyro dynamics, generalized coordinates. Lagrange's equations.

**Requisites:** (E M A 202, M E 240, or PHYSICS 311), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **E M A 545 – MECHANICAL VIBRATIONS**

3 credits.

General theory of free, forced, and transient vibrations; vibration transmission, isolation, and measurement; normal modes and generalized coordinates; method of matrix equation formulation and solution. The application of theory and methods to the analysis, measurement and design of dynamic systems.

**Requisites:** (E M A 202, M E 240, or PHYSICS 311), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **E M A/E P 547 – ENGINEERING ANALYSIS I**

3 credits.

Methods of higher mathematics; stress on problem solving rather than rigorous proofs; linear algebra, calculus of variations, Green's function.

**Requisites:** MATH 321, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **E M A/E P 548 – ENGINEERING ANALYSIS II**

3 credits.

Function of complex variable, series solution of differential equations, partial differential equations. A year of math beyond calculus

**Requisites:** (MATH 322 and 320), (MATH 322 and E M A/E P/ E M A 547), or (MATH 322, 319, and 340), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **E M A/ASTRON 550 – ASTRODYNAMICS**

3 credits.

Coordinate system transformations, central force motion, two body problem, three and n-body problem, theory of orbital perturbations, artificial satellites, elementary transfer orbits, and elementary rocket dynamics.

**Requisites:** (E M A 202, M E 240, or PHYSICS 311, or concurrent enrollment), or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **E M A 569 – SENIOR DESIGN PROJECT**

3 credits.

Students will select specific engineering design projects. These projects will be student team efforts supervised by individual faculty members.

**Requisites:** E M A 469 and (have completed or be concurrently enrolled in two of E M A 506, 519, 521, 542, 545)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/M E 570 – EXPERIMENTAL MECHANICS**

3 credits.

Experimental methods for design and analysis of mechanical components, structures and materials. Electrically and optically recorded stress, strain and deformation data; computer acquisition/reduction/presentation techniques; applications to static and transient events, sensors, transducer design, NDT, fracture and residual stresses.

**Requisites:** Senior standing and (M E 306, E M A 303 or 304) or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A 599 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E M A 601 – SPECIAL TOPICS IN ENGINEERING MECHANICS**

1-3 credits.

Selected topics in such areas as structural mechanics, dynamics, experimental mechanics, vibrations, engineering materials, soil mechanics, engineering analysis, rheology, etc.

**Requisites:** Graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**E M A 605 – INTRODUCTION TO FINITE ELEMENTS**

3 credits.

A first course in finite elements, with theory and applications in stress analysis and in areas related to structural mechanics. Practice in the use and/or development of computer programs.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A 610 – STRUCTURAL FINITE ELEMENT MODEL VALIDATION**

3 credits.

An introduction to test-based validation of finite element models for the design and analysis of dynamic structures.

**Requisites:** E M A 545 or M E 440, or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E M A 611 – ADVANCED MECHANICAL TESTING OF MATERIALS**

3 credits.

Theory and use of servo-controlled, electro-hydraulic equipment for research of mechanical properties of engineering materials. Measurement of stress, strain, hysteresis energy, and material properties during deformation and at fracture. Analysis of four significant components of total strain.

**Requisites:** (E M A/M E 307 or M E/E M A 307) and (E M A 506 or concurrent enrollment), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/E P 615 – MICRO- AND NANOSCALE MECHANICS**

3 credits.

An introduction to micro- and nanoscale science and engineering with a focus on the role of mechanics. A variety of micro- and nanoscale phenomena and applications covered, drawing connections to both established and new mechanics approaches.

**Requisites:** Graduate/professional standing or E M A 303 or M E 306

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E M A 622 – MECHANICS OF CONTINUA**

3 credits.

Tensor analysis; analysis of stress, strain and rate of strain; application of Newtonian mechanics to deformable media; mechanical constitutive equations; field equations of fluid mechanics and elasticity.

**Requisites:** MATH 340 or (MATH 320 and 321), or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 630 – VISCOELASTIC SOLIDS**

3 credits.

Linear theory of viscoelasticity; non-aging materials; Boltzmann superposition principle; time-temperature superposition boundary value problems. Applications: vibration damping, relaxation of stress, creep, droop, and sag in structural members, sound absorption, creep buckling, settlement of foundations, tire mechanics, and shock attenuation.

**Requisites:** M E 306 or E M A 303, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E M A 642 – SATELLITE DYNAMICS**

3 credits.

Review of Euler's equations, torque-free motion, stability of rotation, energy dissipation effects, gyroscopic instruments, gyrodynamics of the Earth, gravity gradient stabilized satellites, spin stabilized satellites, dual spin satellites, tethered satellites, mass movement techniques, space vehicle motion and rocket dynamics.

**Requisites:** E M A 542 or PHYSICS 311, or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A 690 – MASTER'S RESEARCH**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Declared in Engineering Mechanics, M.S., Ph.D., or Doctoral Minor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

**E M A 700 – THEORY OF ELASTICITY**

3 credits.

Equations of elasticity in curvilinear and rectangular coordinates; two dimensional problems; problems of prismatic bars; variational methods and energy principles; complex variable and numerical methods; thermal stress problems. Knowledge of advanced mechanics of materials [such as E M A 506] and vector calculus [such as MATH 321] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E M A 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2020

**E M A/M E 703 – PLASTICITY THEORY AND PHYSICS**

3 credits.

Physical foundations of plasticity as a basis for choices made in the formulation of theories representing plastic deformation and their limitation. Motion of dislocations and formation and growth of deformation twins. Experimental results in the context of plasticity models. Traditional and research topics of plasticity and theories for rate-independent, rate-dependent, single and polycrystal descriptions. Numerical solution of equations and computational plasticity. Knowledge of mechanics of materials [such as E M A 303 or M E 306] and continuum mechanics [such as E M A 622] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E M A 705 – ADVANCED TOPICS IN FINITE ELEMENTS**

3 credits.

Finite element methods for problems with linear and nonlinear media. Stress analysis, heat transfer, and fluid dynamics. Vibration and transient analysis. Weighted residual methods. Material and geometric nonlinearity. Nonlinear iteration methods. Instructor may also select additional material. Knowledge of finite element theory [such as E M A 605] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E M A/M E 706 – PLATES, SHELLS AND PRESSURE VESSELS**

3 credits.

Stress and deflection analysis of structural plates and membranes under mechanical and thermal loads; variational and numerical methods; instability and vibrations; membrane shell theory; cylindrical shells; pressure vessel and piping design applications; ASME Pressure Vessel Code. Knowledge of mechanics of materials [such as M E 444 or E M A 506] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**E M A/M E 708 – ADVANCED COMPOSITE MATERIALS**

3 credits.

Contemporary topics such as new materials; smart materials/structures/systems; fatigue; fracture; experimental techniques; nondestructive evaluation; transient, micro, three-dimensional, nonlinear, inelastic and environmental effects; manufacturing methods: repair and applications. Knowledge of composite materials [such as E M A/CIV ENGR/M E 508] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**E M A/M E 722 – INTRODUCTION TO POLYMER RHEOLOGY**

3 credits.

Formulation of constitutive equations using embedded base vectors. Viscosity, normal stress differences, stress relaxation, elastic recoil. Polymer rheology; homogeneous strain history. Knowledge of differential equations [such as MATH 320] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**E M A 742 – THEORY AND APPLICATIONS IN ADVANCED DYNAMICS**

3 credits.

Dynamical systems theory, advanced rigid body attitude dynamics, Lagrange's equations of motion, conservation laws, quasi-coordinates, Routh's method for ignorable coordinates, Hamilton's equations of motion, dynamic stability, Liapunov stability methods, angular momentum methods for systems of rigid bodies, modeling of rotating elastic systems, Kane's equations of motion, deterministic chaos. Knowledge of advanced three-dimensional dynamics [such as E M A 542 or PHYSICS 311] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**E M A 745 – ADVANCED METHODS IN STRUCTURAL DYNAMICS**

3 credits.

Emphasis is placed on techniques used to analyze aerospace structures. Variational principles, Hamilton's extended principle, Lagrange's equations, mathematical models for continuous systems, natural modes of vibrations, dynamic response using mode superposition, mode acceleration, residual flexibility, vibration analysis using finite element methods, advanced substructure representations, component mode synthesis, systems with rigid body modes for aeronautical and astronautical systems. Knowledge of vibrations [such as E M A 545 or M E 440] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**E M A 747 – NONLINEAR AND RANDOM MECHANICAL VIBRATIONS**

3 credits.

Exact solutions and sectorial linearization; free and forced vibration of mechanical systems with nonlinear restoring force; self-excited mechanical vibrations and relaxation vibrations; subharmonic responses; nonlinear vibration of mechanical systems with more than one degree of freedom; nonlinear vibration of bounded continuous media; random excitation and random response, random vibrations of mechanical systems and structures; random vibrations of nonlinear mechanical systems; failure of materials under random vibrations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**E M A/COMP SCI/E C E/E P/M E 759 – HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of hardware and software solutions that enable the use of advanced computing in tackling computationally intensive Engineering problems. Hands-on learning promoted through programming assignments that leverage emerging hardware architectures and use parallel computing programming languages. Students are strongly encourage to have completed COMP SCI 367 or COMP SCI 400 or to have equivalent experience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E M A/CIV ENGR/M E 775 – TURBULENT HEAT AND MOMENTUM TRANSFER**

3 credits.

Stochastic methods in turbulent heat and momentum transfer; fully developed turbulence; numerical methods including model applications to boundary layers, reacting flows, mass transfer, and unsteady flows; linear and non-linear stability and transition; emphasis on applications of interest to Mechanical, Aerospace, and Environmental Engineers. Knowledge of fluid mechanics [such as M E 363 or CBE 320] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E M A 790 – MASTER'S RESEARCH AND THESIS**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**E M A 890 – PRE-DISSERTATOR RESEARCH**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E M A 990 – RESEARCH AND THESIS**

1-12 credits.

Directed study projects as arranged with instructor.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGINEERING PHYSICS (E P)****E P 271 – ENGINEERING PROBLEM SOLVING I**

3 credits.

Solution of engineering problems using commercially-available software tools (spreadsheets, symbolic manipulators, and equation solvers). The emphasis will be on nuclear engineering problems, including radioactive decay, nuclear cross sections, scattering, and criticality.

**Requisites:** (MATH 222 or 276) and (E M A 201, PHYSICS 201, 207, 247, or concurrent enrollment) or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P 272 – ENGINEERING PROBLEM SOLVING USING MAPLE**

1 credit.

An introduction to multi-step engineering problem solving using Maple (symbolic mathematics) software.

**Requisites:** MATH 222 or 276, or member of Engineering Guest Students**Repeatable for Credit:** No**E P 418 – SUSTAINABLE ENERGY CHALLENGES AND SOLUTIONS**

1 credit.

Interdisciplinary survey of energy research topics. Understand how sustainable energy challenges are being studied and solved by different disciplines, from science and engineering to social sciences and humanities. Analyze energy sustainability using a multi-disciplinary, systems-based approach.

**Requisites:** Declared in the Certificate in Engineering for Energy Sustainability or Engineering: Sustainable Systems Engineering, MEng**Repeatable for Credit:** No**Last Taught:** Spring 2023**E P 468 – INTRODUCTION TO ENGINEERING RESEARCH**

1 credit.

An introduction to the conduct of engineering research: the scientific method, ethics in research, documentation and treatment of research data, publication practices, and the structure of the broader research community are covered.

**Requisites:** Declared in Engineering Physics**Course Designation:** Honors - Accelerated Honors (!)**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P 469 – RESEARCH PROPOSAL IN ENGINEERING PHYSICS**

1 credit.

An introduction to current research topics in engineering physics.

Development of an undergraduate research proposal supervised by faculty members.

**Requisites:** E P 468 and declared in Engineering Physics**Course Designation:** Honors - Accelerated Honors (!)**Repeatable for Credit:** No**Last Taught:** Spring 2023**E P/E M A 471 – INTERMEDIATE PROBLEM SOLVING FOR ENGINEERS**

3 credits.

Use of computational tools for the solution of problems encountered in engineering physics applications. Topics covered include orbital mechanics, structural vibrations, beam and plate deformations, heat transfer, neutron diffusion, and criticality. Emphasis will be on modeling, choice of appropriate algorithms, and model validation.

**Requisites:** (MATH 319, 320 or 375) and (E P 271 or COMP SCI 310), or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**E P/E M A 476 – INTRODUCTION TO SCIENTIFIC COMPUTING FOR ENGINEERING PHYSICS**

3 credits.

Background for professional numerical computation in Linux environments begins with shell scripting and software archiving. Programming skills in a compiled language are then developed through scientific and engineering examples. Engineering problem-solving skills are reinforced through applications that require numerical solutions to systems of differential and/or integral equations, while motivating progressively more advanced computational methods.

**Requisites:** (E P 271, COMP SCI 300, or 310) and (MATH 319, 320, or 375), or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022



**E P/E M A 547 – ENGINEERING ANALYSIS I**

3 credits.

Methods of higher mathematics; stress on problem solving rather than rigorous proofs; linear algebra, calculus of variations, Green's function.

**Requisites:** MATH 321, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P/E M A 548 – ENGINEERING ANALYSIS II**

3 credits.

Function of complex variable, series solution of differential equations, partial differential equations. A year of math beyond calculus

**Requisites:** (MATH 322 and 320), (MATH 322 and E M A/E P/ E M A 547), or (MATH 322, 319, and 340), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P/M E 566 – CRYOGENICS**

3 credits.

Applications of cryogenics, material properties at low temperatures, refrigeration and liquefaction systems, measurement techniques, insulation, storage and transfer of cryogenics, safety and handling.

**Requisites:** (M E 361 or PHYSICS 415) and (CBE/B M E 320 or M E 364), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**E P 568 – RESEARCH PRACTICUM IN ENGINEERING PHYSICS I**

3 credits.

Undergraduate research projects supervised by faculty members.

**Requisites:** E P 469 and declared in Engineering Physics

**Course Designation:** Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P 569 – RESEARCH PRACTICUM IN ENGINEERING PHYSICS II**

3 credits.

Undergraduate research projects supervised by faculty members. Senior thesis.

**Requisites:** E P 568 and declared in Engineering Physics

**Course Designation:** Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P 602 – SPECIAL TOPICS IN ENGINEERING PHYSICS**

1-3 credits.

Subject matter, credits and prerequisites vary.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**E P/E M A 615 – MICRO- AND NANOSCALE MECHANICS**

3 credits.

An introduction to micro- and nanoscale science and engineering with a focus on the role of mechanics. A variety of micro- and nanoscale phenomena and applications covered, drawing connections to both established and new mechanics approaches.

**Requisites:** Graduate/professional standing or E M A 303 or M E 306

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E P/COMP SCI/E C E/E M A/M E 759 – HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of hardware and software solutions that enable the use of advanced computing in tackling computationally intensive Engineering problems. Hands-on learning promoted through programming assignments that leverage emerging hardware architectures and use parallel computing programming languages. Students are strongly encourage to have completed COMP SCI 367 or COMP SCI 400 or to have equivalent experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P/M E 777 – VACUUM TECHNOLOGY**

3 credits.

Topics defining modern vacuum technology, including the kinetic theory of gases, conductance, pumping systems, pump technologies, pressure measurement, gas-surface interactions, sealing technologies, leak detection, and residual gas analysis will be addressed through a combination of lectures, laboratory activities, problem solving, and group discussions. Knowledge of fluid mechanics [such as M E 363 or B M E 320] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**E P 920 – ENGINEERING PHYSICS GRADUATE SEMINAR**

0-1 credits.

Students will be able to enroll for credit more than once because the topics of the course will differ substantially from semester to semester. Our MS requirements permit up to 3 credits within the 30-credit minimum for the degree.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

## ENGINEERING PROFESSIONAL DEVELOPMENT (E P D)

**E P D 275 – TECHNICAL PRESENTATIONS**

2 credits.

Principles and theory of effective oral technical presentations. Provides a framework for applying the principles in professional settings common to the engineering profession. Preparation, delivery, and evaluation of oral presentation on technical subjects, analysis of professional "real-world" technical presentations, survey of presentation technology, self-analysis including listening and non-verbal skills, and practice of group discussion and interview skills.

**Requisites:** Sophomore standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**E P D 361 – FUNDAMENTALS OF ENGINE THERMODYNAMICS**

2 credits.

Theory and application of energy methods in engineering; conservation of mass and energy; energy transfer by heat, work and mass; thermodynamic properties; analysis of open and closed systems; the second law of thermodynamics and entropy; vapor and gas power cycles.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**E P D 398 – TECHNICAL COMMUNICATIONS INTERNSHIP**

1 credit.

Internship with local corporation, industry, government agency, or educational unit. Includes classroom components: use and misuse of social media; managing workplace-related conflicts; communicating technical information to colleagues; identifying and resolving engineering ethics challenges; practicing group discussion and presentation skills.

**Requisites:** INTEREGR 397 and declared in Certificate in Technical Communication**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E P D 416 – ENGINEERING APPLICATIONS OF STATISTICS**

3 credits.

Provides knowledge and skills to apply statistics to many types of engineering problems. Focuses on developing statistically-based experimental techniques and tests for measures of validity, application of computer-based statistical tools, and approaches to distillation of data.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P D 455 – PYTHON FOR APPLICATIONS IN ENGINEERING**

1 credit.

Introduction to Python's concepts of objects and reference; classes and nested objects. Elements of object-oriented programming in Python. Container types: lists, dictionaries, and tuples. Installing Python packages and managing environments. Scientific computing with Numpy and SciPy. Applications of Python to Data Analysis. Applications of Python to Machine Learning. Applications of Python to embedded systems/robotics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P D 497 – TECHNICAL EDITING**

1 credit.

Principles and practices of editing technical and scientific documents. Overview of the editing process; defining the editor's rules and responsibilities, revising at structural and sentence levels, and addressing stylistic conventions of technical fields. Application to technical and scientific documents such as reports, proposals, and user manuals.

**Requisites:** INTEREGR 397**Repeatable for Credit:** No**Last Taught:** Spring 2016**E P D 499 – SENIOR INDEPENDENT STUDY**

1-3 credits.

Under faculty supervision.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**E P D 518 – QUALITY ENGINEERING AND QUALITY MANAGEMENT**

3 credits.

Enhances the learners' basic business and decision-making skills related to quality systems and process improvement.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**E P D 610 – ENGINEERING ANALYSIS FOR DECISION MAKING**

3 credits.

Quantitative and qualitative analysis and visualization tools. Structured decision-making methodology for engineering applications such as variations in materials and production, process control, forecasting and executive decision making. Facilitate persuasive problem-solving and decision making in engineering applications. Builds on foundational knowledge of statistics.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 611 – ENGINEERING ECONOMICS AND MANAGEMENT**

3 credits.

Addresses principles and practices of interpreting financial information and performing engineering-related economic analyses. Focuses on the practical use of economic information for decision-making.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 612 – TECHNICAL PROJECT MANAGEMENT**

3 credits.

Learn key principles and tools of project management applicable to a broad range of engineering projects. Covers techniques for project planning, scheduling, resource allocation, and project tracking, as well as the interface between projects and the organizations within which they are executed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 613 – INTERNATIONAL ENGINEERING STRATEGIES AND PRACTICES**

3 credits.

Provides a deeper understanding of various elements of culture related to business, avoiding the pitfalls, and finding the complementary strengths that will benefit the business. International strategy and the managerial implications such as product, country, location, and organization choices for a multinational engineering operation will be assessed, analyzed and applied. Further discussion will be focused on multi-cultural organization issues and exploring best practices.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 614 – MARKETING FOR TECHNICAL PROFESSIONALS**

3 credits.

Equips practicing engineers and related technical professionals to develop an in-depth understanding of marketing. Learn to partner more effectively with marketing specialists, better market own ideas and projects, gain buy-in from upper management, and better serve internal and external clients.

**Requisites:** Graduate/professional standing. Not open to students declared in Business: Marketing, MBA.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 616 – ENGINEERING LAW**

2 credits.

Addresses important legal issues especially relevant to the practice of engineering. Gain awareness and ability to properly address patents, trade secrets, contracts, employment and non-disclosure agreements, as well as product and professional liability. Learn to avoid legal problems that often affect engineering projects and organizations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 617 – COMMUNICATING TECHNICAL INFORMATION**

3 credits.

Develops skills necessary for engineering professionals to communicate technical and managerial information. Covers approaches for communicating to diverse audiences and for action-oriented purposes. Emphasizes communication problem solving and communication efficiency. Includes individual and collaborative projects using oral, written, and electronic media.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 618 – APPLIED LEADERSHIP AND MANAGEMENT OF ENGINEERING ORGANIZATIONS**

3 credits.

Addresses strategies, models, and practices for leading and managing engineering organizations in a context directly relevant to practicing engineers. Engage in self-reflection about styles, beliefs, and past experiences with leadership and management. Course project of direct relevance to student's organization will integrate theory, models, case studies, and real-time experiences from student's workplace. Gain broad exposure to diverse approaches to leadership and management, and a deeper understanding of how to put what is being learned into effective action.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 619 – FOSTERING AND LEADING INNOVATION**

3 credits.

Learn to develop vision, culture, and practices that value and drive innovation within engineering and technical organizations. Grow your ability to build an enterprise that values, pursues, and delivers innovative technical services and products.

**Requisites:** Declared in Master of Engineering: Engineering Management, Data Analytics, Engine Systems, Manufacturing Systems Engineering, or Sustainable Systems Engineering

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 620 – ELECTRIFIED POWERTRAIN SYSTEMS**

2 credits.

Micro, mild, full, and plug-in electrical powertrain systems, their components and the interactions between them, with special attention paid to generators, motors, and inverters. Learn about key metrics for sizing and matching components based on performance.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 621 – BATTERIES FOR XELECTRIFIED VEHICLES**

2 credits.

Concepts of vehicle hybridization levels; battery accessories, components, and materials; battery life and management; as well as various failure modes of batteries. Development of equivalent circuit models (ECM) for cells that can be used for real time control and diagnostics.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 622 – ENGINE DESIGN I**

3 credits.

Provides an understanding of engine applications, customer need assessment, and engineering product planning.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Engine Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**E P D 623 – ENGINE DESIGN II**

3 credits.

Provides an advanced understanding of internal combustion engine design.

**Requisites:** E P D 622

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E P D 624 – ENGINE PERFORMANCE AND COMBUSTION**

4 credits.

Provides a physically based understanding of combustion, efficiency, and exhaust emission formation and control in internal combustion engines.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 625 – ENGINE GAS DYNAMICS**

2 credits.

Provides a physically based understanding of gas dynamics with applications to internal combustion engines.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 627 – PERSPECTIVES ON ENGINE MODELING SEMINAR**

1 credit.

Problem definition and planning, tool selection, model construction, calibration, application and data presentation in order to integrate the most appropriate modeling tools into an engine design and development project.

**Requisites:** Graduate/professional standing, declared in Capstone Certificate in Engine Design, or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**E P D 628 – ANALYSIS OF TRENDS IN ENGINES**

2 credits.

Take a scientifically-based look at trends in energy availability, emission control and refueling, and technological advances to make an assessment of the future of engines and powertrain systems for vehicles throughout the world.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Engine Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**E P D 629 – POWERTRAIN SYSTEMS AND CONTROLS**

3 credits.

Explore fundamental control concepts for development and analysis, modeling requirements and considerations related to control and diagnostics, and the application of these tools to powertrain systems.

**Requisites:** Declared in Engineering: Engine Systems ME or Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E P D 630 – ENGINE DESIGN III**

3 credits.

Builds further experience in engine development project organization; materials and processes; and engine validation. Project organization lessons emphasizing the phases of engine development and the importance of a design freeze with increased scrutiny of design modifications as the engine progresses toward production. Additional engine system components and processes such as forging, plastic molding, and billet machining. Reliability validation expanded to component and system-level validation through rig and engine testing. Test plans calibrated to engine volumes and cost in order to develop an appropriate mechanical development and reliability plan.

**Requisites:** E P D 623

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**E P D 631 – ELECTRIFIED VEHICLE-LEVEL MODELING**

2 credits.

Development of hybrid and electric vehicle powertrain and sub-system mathematical models. Simulations of drive cycles for evaluating component, sub-system, or package performance in the vehicle for fuel economy and emissions.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**E P D 633 – ENGINE BOOSTING**

2 credits.

Application of fundamental fluid dynamics and thermodynamics principles to intake air boosting for internal combustion engines. Turbocharger and Supercharger design and operating principles, applications to engine system design. Includes both simple, single-stage systems, and multi-stage systems (series, series-sequential, parallel-sequential). Pulse conservation and exhaust gas recirculation will be addressed. Includes advanced considerations including the Miller Cycle, turbocompounding, and e-boosting.

**Requisites:** E P D 625 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**E P D 635 – EXHAUST AFTERTREATMENT SYSTEMS**

2 credits.

Fundamental development of the science and engineering underlying the design of exhaust aftertreatment (catalyst) systems for automotive (internal combustion engine containing) systems. Emphasis is on gasoline and diesel, spark-ignition and compression-ignition combustion engines, though the same fundamentals may be applied to other fuels or combustion types. Introductory material is included on aspects that are related to emissions, including regulatory standards, gasoline and diesel engine basics, fuels, lubricants, combustion, instrumentation, and formation of pollutants. Several causes of emissions and pollutants are intertwined throughout the various topics and the control and treatment of specific emissions species are discussed by device type.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 636 – INTRODUCTION TO POLYMERS**

3 credits.

Introduction to the chemistry and physics of polymeric materials. Concepts of polymer synthesis as well as physical properties are introduced, including molecular weight, chain conformation, step growth and chain growth kinetics, basic rheology and viscoelasticity as well as glass transition and crystallinity.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 637 – POLYMER CHARACTERIZATION**

3 credits.

Basic principles used for both quantitative and qualitative characterization of polymeric materials, including both assessment of their synthesis and of their structural features at different length scales. Discussion of techniques such as NMR (Nuclear Magnetic Resonance) and GPC (Gel Permeation Chromatography), thermal characterization, rheological characterization, as well as scattering of various types of electromagnetic radiation. Introduction to characterization methods used in industry and polymer crystallography.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 638 – POLYMER COATINGS**

3 credits.

Introduction to coatings, especially focusing on the polymer science and chemistry in these coatings. Chemistry behind these coatings, physical science such as film formation, and the role of various additives used in common formulations.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E P D 639 – PLASTICS RECYCLING AND SUSTAINABILITY**

3 credits.

Sustainability and recycling aspects in the life cycles of plastics and polymeric materials. Chemistries that can be used to make polymers from sustainable or renewable sources and biodegradable polymers. Current recycling practices and their limitations including polymer-based materials such as composites and layered packaging. Textile recycling and plastic pollution including microplastics are covered.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 640 – INTRODUCTORY POLYMER RHEOLOGY**

3 credits.

Introduction to polymer rheology. Concepts of continuum mechanics are introduced, specifically the fluid dynamics of non-Newtonian and linear viscoelastic fluids. Material functions, constitutive equations and rheometry and experimental methods for measuring material functions (rheometry) are discussed. Knowledge of linear differential equations [such as MATH 319 or 320] and fluid mechanics [such as ME 363] or momentum transfer [such as CBE 320] required.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 642 – THERMODYNAMICS OF ENGINE SYSTEMS**

3 credits.

Use the 1st and 2nd laws of thermodynamics in the analysis of engines. Use ideal gas mixtures, thermodynamics and combustion principles to determine adiabatic flame temperature and chemical equilibrium - with focus on Engine Systems

**Requisites:** Declared in Engineering: Engine Systems MEng

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 645 – ELECTRIC MACHINES FOR TRACTION APPLICATIONS**

2 credits.

Reviews the physics of electric machines. Covers electric machine operation used both in motoring and generating modes necessary in traction applications. The fundamentals of brush DC, PM synchronous, reluctance, and induction machines are explored. Begins with the basics of DC machines and extends to the concept of field orientation in AC machines.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 646 – ELECTRIC DRIVES FOR TRACTION APPLICATIONS**

2 credits.

Electric drives operation used both in motoring and generating modes necessary in traction applications. The fundamental drives of brush DC, PM synchronous, reluctance, and induction machines are explored. Begins with the basics of drives and extends to the device physics of power electronics used in drives.

**Requisites:** E P D 645 or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 647 – TRENDS IN ELECTRIFICATION SEMINAR**

1 credit.

Discussion of major trends in the automotive and transportation industry, focused on electrification for hybrids, fuel cells, and fully electric vehicles.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Powertrain Electrification

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**E P D 650 – INTRODUCTION TO POLYMERS PROCESSING**

3 credits.

Introduction to the principles of polymer processing. Review of the basic techniques primarily in use by industry as well as foundational principles of polymer physics, viscoelasticity and rheology. Focus on understanding how design of process is used to achieve desired structure and properties. Includes introduction to topics such as 3-d printing and recycling of polymer waste in the context of reprocessing such materials.

**Requisites:** E P D 636 and (E P D 640 or M S E/ CHEM/M S & E 421, or concurrent enrollment), or declared in Capstone Certificate in Polymer Processing Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**E P D 654 – TEACHING IN SCIENCE AND ENGINEERING**

2-3 credits.

Introduction to teaching and learning in science and engineering at the college level. Includes exploration of the learning process, teaching methodology, assessment strategies, course design, teaching philosophies, and careers in education, science, and engineering.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**E P D 660 – CORE COMPETENCIES OF SUSTAINABILITY**

3 credits.

Introduces real-world pragmatic skills and applications in sustainability competencies. Content reaches across engineering expertise, from chemical engineering to buildings to product design and energy. Modules cover ecological footprinting, lifecycle assessment, resource use and integrated engineering practice.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P D 669 – SUSTAINABLE SYSTEMS ENGINEERING CAPSTONE**

3 credits.

Provides the opportunity to demonstrate ability to think globally, sustainably, and creatively. Gain real-world experience by applying theory, tools, and research to conceptualize, analyze, and design a solution to a real-world problem within a social and environmental context. Showcase the knowledge and analytical skills acquired, and integrate tools, science, and communication to address a community or industry need. Work with an industry mentor and customer throughout your project.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**E P D 678 – SUPPLY CHAIN MANAGEMENT FOR ENGINEERS**

3 credits.

Examines concepts, management techniques, and current trends in the field of supply chain management with emphasis on topics relevant to engineers. Topics include global logistics, logistics engineering techniques, new product introduction process, purchasing strategy, managing transportation providers, distribution center technology and operations, outsourcing supply chain functions, and an introduction to supply chain information systems.

**Requisites:** Declared in Manufacturing Systems Engineering: Engineering, M.Eng.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P D 690 – SPECIAL TOPICS IN ENGINEERING PROFESSIONAL DEVELOPMENT**

1-3 credits.

Topics vary.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E P D 699 – INDEPENDENT STUDY**

1-3 credits.

Under faculty supervision.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**E P D 701 – WRITING FOR PROFESSIONALS**

1 credit.

Preparation to produce effective written communication that is suitable for inter-professional and inter-disciplinary audiences in a variety of workplaces. Apply these strategies and tools.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2021**E P D 702 – PROFESSIONAL PRESENTATIONS**

1 credit.

Sharpen your ability to create, edit, review, and present information in an efficient, clear, and effective way for your audiences. Develop your presentation skills through a series of presentations related to your professional interests and work.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**E P D 704 – ORGANIZATIONAL COMMUNICATION AND PROBLEM SOLVING**

1 credit.

Improve your problem solving within complex organizations, with a special emphasis on case studies and improving communication, using cross-disciplinary sources.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Foundations of Professional Development**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022



**E P D 706 – CHANGE MANAGEMENT**

1 credit.

Provides emerging and practicing professionals foundational knowledge to develop a change management strategy and implement it using proven processes and tools. Become better prepared to deliver effective organizational performance. Applies contemporary concepts and methods in change management through student-selected projects.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Foundations of Professional Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D 708 – CREATING BREAKTHROUGH INNOVATIONS**

1 credit.

Explore innovation and how design thinking is a driver of innovation. Learn to use various design thinking methods and tools for analysis and decision-making.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Foundations of Professional Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**E P D 710 – FOUNDATIONS OF ENGINEERING LEADERSHIP**

2 credits.

Build the foundations for developing, refining, and strengthening your effectiveness as a leader of engineering teams, projects, and organizations. Enhance your understanding of how to match your leadership style to a team's focus, organization, and culture. Grow your understanding of your strengths and weaknesses as a leader using proven assessment tools. Develop a plan for growing your leadership competency.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**E P D 712 – ETHICS FOR PROFESSIONALS**

1 credit.

Explores how our actions affect others and influence the choices we make within the workplace. Enhance ethical competencies by providing opportunities to discuss challenges to behavior and decision-making in different professional contexts.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Applied Engineering Management

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 720 – ENGINE NOISE AND VIBRATION**

2 credits.

Introduces the engineer to fundamental NVH (Noise, Vibration, and Harshness) concepts with an emphasis on how NVH can be integrated throughout the engine development process from initial concept inception through to validation testing for production.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**E P D 730 – SUSTAINABLE FACILITIES**

3 credits.

Explore the environmental impacts of commercial and residential buildings, including energy, water, materials, transportation, waste, human health, and land use. All phases of a building's life cycle will be considered, along with relevant case studies, benchmarking tools, public policies and emerging concepts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**E P D 731 – ENERGY EFFICIENCY IN BUILDINGS**

3 credits.

Core principles of energy use and efficiency in the building sector (residential, commercial, institutional buildings.) Factors that influence energy demand (design, equipment, controls, operation, maintenance). Review of engineering fundamentals of heat transfer, heating and cooling loads, psychrometrics. Topics include building envelope principles (climate, orientation, materials, massing), heating and cooling systems, ventilation indoor air quality, plumbing water heating, lighting daylighting, and internal energy uses (plug loads, equipment). Zero energy building concepts, energy modeling, and energy benchmarking are also covered. Applications include existing building operation and improvement, and new building design and planning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**E P D/ACCT IS/GEN BUS 781 – FINANCIAL AND BUSINESS ACUMEN**

1 credit.

This course is designed with a keen awareness for the needs of the non-financial student or professional. For this class, no previous financial training is required. The intent is to equip you with the essential concepts used to develop financial literacy. Content will cover basic financial terms and reports, analytical tools to help interpret financial data and using financial data in budgets and forecasts.

**Requisites:** Graduate/professional standing. Not open to students declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**E P D/GEN BUS/MARKETNG 782 – MARKETING FOR NON-MARKETING PROFESSIONALS**

1 credit.

An overview of marketing's role within an organization, the key elements of a marketing plan, and how the plan is implemented. Students will learn about buyer demographic, psychographic and purchasing decision behavior. A thorough understanding of the customer enables students to develop a coordinated marketing mix (product, price promotion and place) that will satisfy the customer better than the competition and at the required margin. Students will leave the course understanding the degree to which all company functions must be coordinated and focused on the customer. This course will not apply toward fulfilling the MBA degree requirements.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D/GEN BUS/M H R 783 – LEADING TEAMS**

1 credit.

Students will gain the knowledge and skills to continuously enhance their own team performance and productivity as well as the teams they are involved with. They will also be in a much better position to lead teams effectively.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**E P D/GEN BUS/OTM 784 – PROJECT MANAGEMENT ESSENTIALS**

1 credit.

Techniques that will help to plan, execute, and deliver projects with desired scope on time and on budget. Learn to document clear project objectives and goals, accurately estimate project time and costs, schedule and allocate time-critical resources, and establish feedback systems for optimal project control.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**E P D/GEN BUS/M H R 785 – EFFECTIVE NEGOTIATION STRATEGIES**

1 credit.

Improves students' negotiating skills, doing so by providing a theoretical underpinning that will help them to understand the sources of effective and ineffective approaches to negotiations.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENGLISH (ENGL)****ENGL 100 – INTRODUCTION TO COLLEGE COMPOSITION**

3 credits.

Focuses on development of rhetorical reading, listening, and writing abilities; provides practice in written and spoken communication (emphasis on writing); develops information literacy; provides a foundation for a variety of college course work and post-college careers.

**Requisites:** Students required to take the MSN ESLAT cannot enroll until the ESL 118 requirement is satisfied

**Course Designation:** Gen Ed - Communication Part A  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/THEATRE 120 – INTRODUCTION TO THEATRE AND DRAMATIC LITERATURE**

3-4 credits.

Reading important plays, attending stage productions, writing and thinking critically about theatre and drama. Emphasis on developing analytic skills in dramatic literature and theatre production.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 140 – COMM B TOPICS IN ENGLISH LITERATURE**

4 credits.

A course on literature written in English that satisfies the Comm B requirement. Topic will vary by semester.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 141 – SCIENCE FICTION AND FANTASY**

3 credits.

An introduction to the literature of science fiction and fantasy; specific topics will vary.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 142 – MYSTERY AND CRIME FICTION**

3 credits.

An exploration of mystery and crime fiction written in English.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2017

**ENGL 143 – THE GRAPHIC NOVEL**

3 credits.

An introduction to graphic story-telling in English, including attention to its history and developing form in the present day.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**ENGL/GEN&WS 144 – WOMEN'S WRITING**

3 credits.

An introduction to literature in English written by women in various periods and places; specific topics will vary.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 145 – AMERICAN DREAMERS**

3 credits.

A study of novels, plays, poems, and films that focus on individuals who strive to achieve success and security in America.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ENGL/ASIAN AM 150 – LITERATURE & CULTURE OF ASIAN AMERICA**

3 credits.

Since the 19th century, "America" has often been defined by its relationship with "Asia," through cultural influence, immigration, imperialism, and war. Traces the role of Asia and Asians in American literature and culture, from the Chinese and Japanese cultural influences that helped shape literary modernism to the rise of a distinctive culture produced by Asian immigrants to America and their descendants.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL/ENVIR ST 153 – LITERATURE AND THE ENVIRONMENT**

3 credits.

An introduction to literature in English about the natural world and humankind's relationship with it; specific topics will vary.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 155 – MYTH AND LITERATURE**

3 credits.

Introduction to concepts of myth and mythology, myth-making and the modern study of myth in relation to myths and legends common in English and American literature.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 156 – LITERATURE AND MEDICINE**

3 credits.

Exploration of literature as both a source of knowledge about medicine and as a catalyst for reflection about medical concepts and practices, including health, illness, dying, and disability. Students will consider ways that literature can serve as a resource for patients and healthcare practitioners.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 162 – SHAKESPEARE**

3 credits.

Introduction to several of Shakespeare's most popular plays and their relation to other works of English and American literature.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 167 – BRITISH AND AMERICAN WRITERS**

3 credits.

An introduction to British and American literature through particular writers and themes.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 168 – MODERN LITERATURE**

3 credits.

A thematic introduction to literary works in a variety of genres written in English from the turn of the twentieth century to the present day. Emphasis may vary between writers from the U.S., Britain, Ireland, and other Anglophone nations.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 169 – MODERN AMERICAN LITERATURE**

3 credits.

An introduction to selected fiction, prose, drama and poetry written by Americans from the early twentieth century to the present day.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**ENGL 171 – LITERATURE, GENDER, AND SEXUALITY**

3 credits.

A selected topic relating to gender and sexuality in literature.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**ENGL/AMER IND 172 – LITERATURES OF NATIVE AMERICA**

3 credits.

Introduction to the oral and written literatures of the peoples of native North America. An engagement with texts across historical periods, tribal groups, and regions to examine forms such as oratory, sermon, testimony, autobiography, and contemporary poetry and novels.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 173 – ETHNIC AND MULTICULTURAL LITERATURE**

3 credits.

Introduction to literature that reflects the writing and experience of minority and ethnic groups. Texts will focus on a theme or problem.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 174 – LITERATURE AND SOCIAL JUSTICE**

3 credits.

An introduction to the multiple ways writers have used literary texts to engage with pressing questions about class, race, gender, equality, immigration, and other issues of social justice. Specific topics will vary.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 175 – LITERATURE AND THE OTHER DISCIPLINES**

3 credits.

The depiction and valuation of other academic disciplines and intellectual work in selected works of British and American literature and the intellectual influences of other disciplines on selected works and movements of British and American literature.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 176 – TOPICS IN LITERATURE AND FILM**

3 credits.

An introduction to the interplay of literature and film in English, with a focus on the analysis of novels, stories, poems and other writings and their representation and transformation in and through film; specific topics will vary.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 177 – LITERATURE AND POPULAR CULTURE**

3 credits.

A selected topic studying the intersection of literature and popular culture in various forms and media.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 178 – DIGITAL MEDIA, LITERATURE, AND CULTURE**

3 credits.

An introduction to the intersection of ever-evolving digital technologies with the production and reception of literature. Examine the role of digital media in structuring the knowledge and experience of literary works; and provides an opportunity for critical and potentially creative practice.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 181 – FIRST-YEAR HONORS SEMINAR**

3 credits.

Honors literature seminar for first year students. Topic and materials will vary.

**Requisites:** First Year students only and declared in an Honors program**Course Designation:** Gen Ed - Communication Part B

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ENGL 182 – INTRODUCTION TO LITERATURE FOR HONORS**

3 credits.

Introductory honors course in discussion format. Topic and materials will vary.

**Requisites:** Declared in an Honors program**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 200 – WRITING STUDIO**

1 credit.

The focus is on students' own writing in this workshop-oriented course for writers in any discipline. Theoretical and practical foundations for drafting, revising, and reviewing a range of academic genres and approaches. Students should be enrolled concurrently in another course where academic writing is assigned.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 201 – INTERMEDIATE COMPOSITION**

3 credits.

Provides practice in persuasive writing in various modes, styles, and genres; develops an understanding of the different contexts of writing, both scholarly and public; provides opportunities for exploring the relation between writing and speaking; and provides critical tools for the rhetorical analysis of expository prose. Not open to auditors

**Requisites:** Satisfied Communications A requirement and sophomore standing**Course Designation:** Gen Ed - Communication Part B

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ENGL 204 – STUDIES IN WRITING, RHETORIC, AND LITERACY**

3 credits.

What do texts do? How? For whom? How and why do writers and readers compose texts that have an impact? Approaches these enduring questions of English studies from the perspective of Composition Rhetoric, one of English's subfields. Emphasizing critical reading and writing and built around a central theme that varies by semester, the course prepares students to analyze historical and/or contemporary examples of how texts create communities, influence beliefs, and shape knowledge.

**Requisites:** Satisfied Communications A requirement and sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 207 – INTRODUCTION TO CREATIVE WRITING: FICTION AND POETRY WORKSHOP**

3 credits.

Fiction writing and poetry writing, with readings of writers as models.

**Requisites:** First Year, freshman or sophomore standing only

**Course Designation:** Gen Ed – Communication Part B

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 214 – THE ENGLISH LANGUAGE**

3 credits.

An overview of the structure, use, and development of the English language and its varieties.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 219 – SHAKESPEAREAN DRAMA**

3 credits.

A survey covering most of the plays through 1600.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ENGL 220 – SHAKESPEAREAN DRAMA**

3 credits.

A survey covering most of the plays after 1600.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENGL/LITTRANS 223 – VLADIMIR NABOKOV: RUSSIAN AND AMERICAN WRITINGS**

3 credits.

The major novels of Vladimir Nabokov studied in the context of Russian and American literatures. Nabokov as a quintessential artist in exile, whose work explores loss of language, country and home.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 224 – INTRODUCTION TO POETRY**

3 credits.

A survey of elements and styles of poetic form. Readings will be selected from British and American literature written in English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ENGL 236 – BASCOM COURSE**

3 credits.

A low-enrollment course developing skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**ENGL 241 – LITERATURE AND CULTURE I: TO THE 18TH CENTURY**

3 credits.

What is a person, a home, a nation, a world? What we now call "English literature" begins with these questions, imagining a cosmos filled with gods and heroes, liars and thieves, angels and demons, dragons and dungeons, whores and witches, drunken stupor and religious ecstasy. Authors crafted answers to these questions using technologies of writing from parchment to the printing press, and genres old and new, from epic and romance to drama and the sonnet. Develops skills of critical reading and writing that are essential to majors and non-majors alike.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 242 – LITERATURE AND CULTURE II: FROM THE 18TH CENTURY TO THE PRESENT**

3 credits.

Considers a period of unparalleled tumult: a time of vast world empires and startling new technologies, revolutions that radically redefined self and community, two cataclysmic world wars, the emergence of ideas of human rights, and the first truly global feelings of interconnectedness. How has literature captured and contributed to these dramatic upheavals? Some writers worldwide have struggled to invent new forms, new words, and new genres to do justice to a world in crisis, while others have reached back in time, seeking continuity with the past. Explore enduring traditions of poetry and drama and think about experiments in the new, globally popular genre of the novel. Develops skills of critical reading and writing that are essential to majors and non-majors alike.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 243 – AMERICAN LITERARY CULTURES**

3 credits.

Is America a new world, a city on a hill, an imperial power? Are American literatures revolutionary, nationalist, countercultural? Explores how writers have wrestled with such questions for several hundred years. We will encounter literary figures from white whales to red wheelbarrows, focusing on the diverse geographies, cultural practices, and political mythologies that compose the Americas, and interrogating what is meant by American literature and what it means to be American. We will consider the ways that genres from Native stories to slave narratives to postmodern novels have contributed to social, intellectual, and political currents of American cultures. Develops skills of critical reading and writing that are essential to majors and non-majors alike.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 245 – SEMINAR IN THE MAJOR**

3 credits.

Offers close instruction in the principles and practices of informed, engaged, critical reading and writing. While the texts and topics vary, each seminar will reinforce fundamental skills taught across the English major, strengthening students' capacities to write and speak powerfully and to build convincing, original, well-organized arguments that persuade audiences of their significance.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL/AMER IND 246 – LITERATURE BY AMERICAN INDIAN WOMEN**

3 credits.

Presents a broad range of literatures from diverse Native traditions and eras, to provide students with a basic knowledge of major issues affecting and best-known texts by American Indian women authors.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**ENGL/GEN&WS 248 – WOMEN IN ETHNIC AMERICAN LITERATURE**

3 credits.

American literature by and about women, written by authors from ethnic groups.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/GEN&WS 250 – WOMEN IN LITERATURE**

3 credits.

Works by British and American writers, with emphasis on women writers of the twentieth century; close reading of texts and discussion of trends, themes, and special characteristics of the role of women in literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ENGL/ASIAN AM 270 – A SURVEY OF ASIAN AMERICAN LITERATURE**

3 credits.

Survey of Asian American literature from 1880 to present.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENGL 271 – WRITING WITH NEW MEDIA**

3 credits.

Digital technologies such as blogs, wikis, videogames, and social media sites present new sites for understanding how we consume and produce information. Approaches these technologies by asking students to study how they fit within the long history of advances in writing technology. Analyze and create digital objects and arguments. Prepares students to meaningfully engage with digital technologies by demonstrating how long-standing theories of reading and writing can be augmented to address emerging technological environments.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ENGL 279 – TOPICS IN ENGLISH, STUDY ABROAD - LITERATURE**

1-6 credits.

Provides an equivalency for intermediate-level English literature courses taken on a UW-Madison study abroad program.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2001

**ENGL 304 – COMPOSITION & RHETORIC IN AND BEYOND THE UNIVERSITY**

3 credits.

Surveys the study of writing and rhetoric. Covers major theories, practices, and research areas in the field of Composition Rhetoric with attention to their importance both inside and outside the University. A good class for English majors interested in graduate study and for prospective teachers.

**Requisites:** Satisfied Communications A requirement and sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL/ENVIR ST 305 – RHETORIC, SCIENCE, AND PUBLIC ENGAGEMENT**

3 credits.

Focuses on theoretical and practical aspects of public engagement with scientific research, policy, and management, with an emphasis on writing, rhetoric, and scientific discourse.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**ENGL 307 – CREATIVE WRITING: FICTION AND POETRY WORKSHOP**

3 credits.

Writing of literary fiction and poetry, reading selected contemporary writers as models.

**Requisites:** Junior standing or ENGL 207. Students may not be concurrently enrolled with ENGL 407, 408, 409, 410, 469, 508, 509, or 695

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 314 – STRUCTURE OF ENGLISH**

3 credits.

Linguistic methods of analysis and description of English syntax and morphology.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 315 – ENGLISH PHONOLOGY**

3 credits.

Basic principles of phonetics and phonology applied to the description of English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 316 – ENGLISH LANGUAGE VARIATION IN THE U.S.**

3 credits.

Description and analysis of geographical and social variation in English in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 318 – SECOND LANGUAGE ACQUISITION**

3 credits.

Systematic study of how people learn ESL and other second languages. An interdisciplinary survey emphasizing research in linguistics, psychology, education, and sociology into the phenomenon of second language acquisition.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 319 – LANGUAGE, RACE, AND IDENTITY**

3 credits.

Relation of culture and genetics to formal properties of human language; consideration of American English dialects and language disorders. Topics include: biological basis of language disorders; racial affiliation and social identity; maintenance of social boundaries; politics of education, speech therapy.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Biological Science or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 320 – LINGUISTIC THEORY AND CHILD LANGUAGE**

3 credits.

An introduction to the linguistic study of child language within the generative theory. According to this theory, humans are born with genetically determined linguistic knowledge called Universal Grammar, which guides children in learning language. Learn the basic concepts of the generative theory and learn to apply them to the study of child language. Topics include universal linguistic principles that govern children's acquisition of syntax and semantics and cross-linguistic influence in children acquiring more than one language from birth or early childhood. Discuss empirical research studies testing the Universal Grammar theory of language acquisition.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 328 – THE SIXTEENTH CENTURY**

3 credits.

Literature and culture of Britain in the sixteenth century.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ENGL 331 – SEVENTEENTH-CENTURY LITERATURE AND CULTURE**

3 credits.

Literature and culture of Britain in the seventeenth century, including the work of John Donne and Ben Jonson.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ENGL 334 – EIGHTEENTH CENTURY LITERATURE AND CULTURE**

3 credits.

Eighteenth-century literature and culture, including such writers as Dryden, Defoe, Swift, and Pope.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ENGL 335 – STAGE AND PAGE IN THE LONG EIGHTEENTH CENTURY**

3 credits.

What happens to English drama after Shakespeare's death? Public theaters closed, considered too racy for the moral health of the population. When they reopened in 1660, sex took center stage in productions of plays both old and new. Women acted on stages in London for the first time, both in roles originally written for cross-dressing boys and in new ones designed for female actors. Female playwrights entered the scene as well, writing for financial profit alongside their male counterparts. Read a sampling of plays and theatrical entertainments performed during the Restoration and eighteenth century as well as publications surrounding the world of the theater to gain a sense of drama on the page and on the stage.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ENGL 336 – EIGHTEENTH-CENTURY NOVEL**

3 credits.

Study of 18th-Century English novel.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 340 – ROMANTIC LITERATURE AND CULTURE**

3 credits.

Literature of the Romantic age in relation to philosophical, cultural, historical, artistic or scientific backgrounds and contexts.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**ENGL 345 – NINETEENTH-CENTURY NOVEL**

3 credits.

Nineteenth-century novel. The century begins with Jane Austen, includes some of the great realist novelists, such as George Eliot and Charles Dickens, and ends with experiments in novel-writing by Oscar Wilde and Joseph Conrad.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 346 – VICTORIAN POETRY**

3 credits.

An exploration of Victorian poets, such as the Brownings, Tennyson, and Christina Rossetti.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ENGL/GEN&WS 350 – SPECIAL TOPICS IN GENDER & LITERATURE**

3 credits.

Investigation of some specific topic in gender and women's studies related to gender and literature. Topic differs each semester.

**Requisites:** GEN&WS 101, 102, 103, or GENWS/SOC/GEN&WS 200

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 351 – MODERNIST NOVEL**

3 credits.

Modernist novelists such as Virginia Woolf, James Joyce, and E. M. Forster.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**ENGL 352 – MODERNIST POETRY**

3 credits.

Exploration of British, Irish, and Anglophone poets working in the early twentieth century, such as W. B. Yeats, T. S. Eliot, Gertrude Stein, and Ezra Pound.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENGL 353 – BRITISH LITERATURE SINCE 1900**

3 credits.

Survey of twentieth-century British literature including fiction, poetry, and drama.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 357 – MAJOR AMERICAN POETS**

3 credits.

Development, range of ideas, and poetic theory of Freneau, Bryant, Whittier, Emerson, Poe, Longfellow, Lowell, Holmes, Dickinson, Lanier, Whitman, Lindsay, and Robinson.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**ENGL/GEN&WS 359 – VISIONARY AND SPECULATIVE FICTION: SOCIAL JUSTICE APPROACHES**

3 credits.

Explores the genre of visionary fiction – speculative fiction written for social justice purposes – as a means to create, build and maintain new worlds. Examines the political potential of literature and multiple examples of visionary fiction.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL/HISTORY/RELIG ST 360 – THE ANGLO-SAXONS**

3 credits.

Life and literature during the Old English period (c450-c1100). Primary emphasis on the vernacular and Latin writings of the Anglo-Saxons themselves. Extensive historical and archaeological background; attention to the development and character of monasticism, to the production of manuscripts, etc. All reading in translation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 361 – MODERN AND CONTEMPORARY AMERICAN LITERATURE**

3 credits.

Survey of modern and contemporary American literature including fiction, poetry, drama, and criticism.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ENGL/CHICLA 368 – CHICANA/O AND LATINA/O LITERATURES**

3 credits.

Historical, political, and aesthetic roots and directions of Latin@ and Chican@ short stories, novels, poetry, music, plays, films, and essays.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL/JEWISH 370 – JEWISH HUMOR**

3–4 credits.

What is humor? Why and when do people tell jokes? And what do we make of the fact that a certain form of humor has come to be labeled "Jewish"? Examine the notion of "Jewish humor" by reading a variety of texts (jokes, short stories, films, websites, conceptual art, and cultural kitsch). Begin by considering theoretical explorations of humor and "Jewish humor." Then trace techniques of Jewish humor from eastern Europe to central Europe to North America, paying specific attention to Jewish American humor. Themes to be examined include: in-group vs. out-group humor; humor and ethnicity; performance and "Jewface"; Jewish-Christian difference; humor and the Holocaust; gender and ethnicity; the notion of self-hatred; American popular culture; and the relationship between humor, repetition, and innovation. The general goal is to answer the question: Is there such a thing as "Jewish humor"? (Hint: The answer may be "no.")

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ENGL 373 – CONTEMPORARY POETRY**

3 credits.

Study of significant recent poetry written in English.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**ENGL 374 – AFRICAN AND AFRICAN DIASPORA LITERATURE AND CULTURE**

3 credits.

Explore classic literary and cultural texts from three regions: Africa, the Caribbean, and African America. Consider the origins and evolution of the African diaspora, and the many forms of its expression. Consider how the African diaspora has shaped US society today, exploring significant themes such as slavery and colonialism, race and cultural identity; intra-racial/cultural and cross-continental alliances and antagonisms; gender and genre; and the paradoxical fate so far-cultural visibility but peripheral political and economic power- of global Afro-cultures. Think about how African-American writers have been influenced by the experience of the African diaspora, and also about the ways that cultural expression from around the world has shaped US culture.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 375 – LITERATURES OF MIGRATION AND DIASPORA**

3 credits.

Literature by or about people who leave homes and homelands by choice or compulsion.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 376 – LITERATURE AND ANIMAL STUDIES**

3 credits.

How does literature help us understand animals and our relation to them?

We address this question by exploring two types of representation:

representation as depiction (the attempt to describe animals in literature)

and representation as a legal or political act (the attempt to speak or act on behalf of animals). Organized around familiar animal categories –

dogs, cats, horses, apes, birds, insects – we examine the representation

of animals in modern literature as a way to give an account of the cultural history of human-animal relations and, in doing so, to make us reflect upon the social, political, and environmental consequences of this history at a time when animal species are disappearing at an alarming rate.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ENGL 379 – POSTCOLONIAL AND WORLD LITERATURE**

3 credits.

English language literatures of former colonies, primarily in Africa and South Asia. While scrutinizing the concept of the "postcolonial" and evaluating its many meanings, class will read some of the significant writers of the postcolonial world and attend to the literary traditions that produced them.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021



**ENGL 400 – ADVANCED COMPOSITION**

3 credits.

Focuses on developing complex understandings of rhetorical, ethical, and literary strategies for writing. Practice in writing a range of nonfiction genres with attention to varieties of style, context, critical standards, and conventions. Designed for students with a strong interest in writing. May include multi-modal assignments.

**Requisites:** Satisfied Communications A requirement and junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/GEN&WS 401 – RACE, SEX, AND TEXTS (HOW TO DO THINGS WITH WRITING)**

3 credits.

Uses writing in many forms and genres to help students explore how race, gender, and sexuality intersect with language and inform textual experiences. From marriage licenses, passports, and don't ask, don't tell policies to literacy requirements and gag rules, written texts have played major roles in enforcing expectations about race and sex in the United States. At the same time, anti-slavery petitions, letters to the editor, wheat-pasted posters, and hashtag activism all also harness the power of writing to challenge and revise those expectations. In light of that active textual production and negotiation, this class traces public debates and daily experiences where people write or talk about race and sex in order to make a difference. Ultimately, the class takes on the power of words to break bones and heal wounds. Through reading and writing informed by scholarship in writing studies and rhetoric, students in this class will examine historical and contemporary interconnections among race, sexuality, gender, and texts in the United States, developing analytical tools for understanding how language works on and in their world.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 403 – SEMINAR ON TUTORING WRITING ACROSS THE CURRICULUM**

3 credits.

Explores current theory and research on the writing process and analyzes disciplinary genres and conventions. Teaches strategies for helping writers revise their work. As Undergraduate Writing Fellows, students will help their peers improve their writing in courses across the curriculum. For students accepted into the Writing Fellows Program. For students accepted into the Writing Fellows program

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 407 – CREATIVE WRITING: NONFICTION WORKSHOP**

3 credits.

Explores a variety of non-fictional prose writing forms including (at the instructor's discretion) personal essay, memoir, travel writing, opinion pieces, investigative journalism, public science writing, and natural history writing. Covers theory and technique, reading the work of established writers and some short writing exercises. Focuses on student writing, both in the classroom and in individual conferences.

**Requisites:** ENGL 207, 307, 407, 408, 409, 410, 411, or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 408, 409, 410, 469, 508, 509, or 695

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 408 – CREATIVE WRITING: FICTION WORKSHOP**

3 credits.

Writing literary fiction.

**Requisites:** ENGL 207, 307, 407, 408, 409, 410, 411, or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 407, 409, 410, 411, 469, 508, 509, or 695

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 409 – CREATIVE WRITING: POETRY WORKSHOP**

3 credits.

Writing literary poetry.

**Requisites:** ENGL 207, 307, 407, 408, 409, 410, 411, or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 407, 408, 410, 411, 469, 508, 509, or 695

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 410 – CREATIVE WRITING: PLAYWRITING WORKSHOP**

3 credits.

Explores the art and craft of writing for the stage. Examines strategies that writers can use to tell stories and communicate ideas both theatrically and dramatically. Covers theory and technique, reading the work of established writers and some short writing exercises. Focuses on student writing, both in the classroom and in individual conferences.

**Requisites:** ENGL 207, 307, 407, 408, 409, 410, 411, or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 407, 408, 409, 411, 469, 508, 509, or 695

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 411 – CREATIVE WRITING: SPECIAL TOPICS WORKSHOP**

3 credits.

Variable topics including: the informal essay, the long poem, the novel, the novella, genre fiction (detective, juvenile, humor, science fiction, etc.), experimental prose and poetry, etc. Students will read models and write their own exercise and full-length pieces.

**Requisites:** ENGL 207, 307, 407, 408, 409, 410, 411, or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Honors – Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 412 – BAD GRAMMAR AND METALINGUISTIC AWARENESS**

3 credits.

Explores the relationship between descriptive and prescriptive grammar. Examines the role of prescriptivism in linguistics from a disciplinary view (why are linguists against it when the public is so clearly interested in singling out some constructions as 'bad grammar'). Provides a historical view (the tradition of grammar writing -- who gets to decide what is 'correct') and a variationist view (corpus-based studies on phenomena like preposition stranding, split infinitives, the distinction of who/whom etc.) of grammar writing. Covers the historical and cultural roots of beliefs about what constitutes 'good' and 'bad' grammar. Introduces linguistic tools and methods to check claims about grammar.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ENGL 413 – ENGLISH WORDS: GRAMMAR, CULTURE, MIND**

3 credits.

Words and rules of combination (grammar) are the two basic building blocks of language. Looks at English words from different linguistic perspectives: As objects of grammar, words follow certain rules of combination (you wouldn't say "these dog"), but they also have internal structure. For example, a word like "hopefulness is fine, while "hopenessful" does not exist. From a psycholinguistic perspective examine how children learn these formal properties as well as the meaning of words. Study how words are stored in the mind and what one can learn from situations in which one cannot access the mental dictionary properly (for example, when one feels a word is on "the tip of one's tongue"). From a sociolinguistic perspective, look at historical and current influences on English vocabulary, including the role of dictionaries and spelling as a source of standardization. Does not require previous knowledge of linguistics.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL 414 – GLOBAL SPREAD OF ENGLISH**

3 credits.

Examination of the linguistic, social, and political impact of the spread of English around the world. Analysis of geographical, social, and stylistic variation in English in diverse world contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 415 – INTRODUCTION TO TESOL METHODS**

3 credits.

Teaching of English to speakers of other languages. Exploration of the contexts in which English is taught, and methods and materials used to teach it.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 416 – ENGLISH IN SOCIETY**

3 credits.

Social and public uses of English; relationships of English structure, lexicon, and discourse to race, gender, class, education, ethnicity, age, and identity; the role of English in public policy.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL 417 – HISTORY OF THE ENGLISH LANGUAGE**

3 credits.

Linguistic and sociolinguistic change in English from its beginnings to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENGL 420 – TOPICS IN ENGLISH LANGUAGE AND LINGUISTICS**

3 credits.

Study of a topic in English language and linguistics.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 422 – OUTSTANDING FIGURE(S) IN LITERATURE BEFORE 1800**

3 credits.

Study of major figure or figures in literature written before 1800.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL/MEDIEVAL 423 – TOPIC IN MEDIEVAL LITERATURE AND CULTURE**

3 credits.

Study of a topic in medieval literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ENGL/MEDIEVAL 424 – MEDIEVAL DRAMA**

3 credits.

Dramatic traditions of medieval England, from early church rituals performed inside quiet monasteries in the tenth century to the elaborate and often raucous urban guild cycles and morality plays of the fifteenth, and with special attention to the significance of spirituality, work, and play in medieval culture.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL/MEDIEVAL 425 – MEDIEVAL ROMANCE**

3 credits.

Important early form of narrative fiction, covering tales of adventure, magic, courtly love, and King Arthur from the twelfth through the fifteenth century.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL/MEDIEVAL 426 – CHAUCERS COURTLY POETRY**

3 credits.

Poetry of the most famous and influential medieval English poet, from his short lyrics on love through his dream visions of talking birds and castles built on ice to the historical romance Troilus and Criseyde. Readings will be in the original Middle English; no prior experience with the language is required.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ENGL/MEDIEVAL 427 – CHAUCER'S CANTERBURY TALES**

3 credits.

Study of the most famous and influential medieval English poet through his best-known work and its playful and profound responses to some of the most pressing literary, social, political, and spiritual issues of his time. Readings will be in the original Middle English; no prior experience with the language is required.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**ENGL 430 – TOPIC IN EARLY MODERN LITERATURE AND CULTURE**

3 credits.

Study of a topic in Early Modern literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**ENGL 431 – EARLY WORKS OF SHAKESPEARE**

3 credits.

Study of four Shakespeare plays through 1600, with the reading of several others.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENGL 432 – LATER WORKS OF SHAKESPEARE**

3 credits.

Study of four Shakespeare plays after 1600 with the reading of several others.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 433 – SPENSER**

3 credits.

Study of Edmund Spenser's major poems.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/RELIG ST 434 – MILTON**

3 credits.

Study of John Milton's poems and selected prose.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ENGL 438 – TOPIC IN EIGHTEENTH-CENTURY LITERATURE AND CULTURE**

3 credits.

Study of a topic in 18th-Century literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 439 – TOPIC IN EARLY AMERICAN LITERATURE AND CULTURE**

3 credits.

Study of a topic in Early American literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**ENGL 443 – OUTSTANDING FIGURE(S) IN LITERATURE SINCE 1800**

3 credits.

Study of outstanding figure(s) in literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**ENGL 444 – TOPIC IN ROMANTIC OR VICTORIAN LITERATURE AND CULTURE**

3 credits.

Study of a topic in 19th-Century British literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 446 – ROMANTIC AUTOBIOGRAPHIES**

3 credits.

Autobiography and romanticism entered into the world at virtually the same moment. This is not only because the early part of the nineteenth century was a time in which, as one contemporary put it, "booksellers, public lecturers, pickpockets, and poets become autobiographers," but also because romanticism has often been understood as an ideology of the self in which the individual imagination is recognized as the source of the world. Explores the meaning of autobiography and its centrality to romanticism through readings in prose, poetry, and criticism.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ENGL 453 – TOPIC IN BRITISH LITERATURE AND CULTURE SINCE 1900**

3 credits.

Study of a topic in British literature since 1900.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ENGL 454 – JAMES JOYCE**

3 credits.

Study of the works of James Joyce.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 455 – A STUDY OF AN OUTSTANDING FIGURE OR FIGURES IN AMERICAN LITERATURE**

3 credits.

Study of a figure in American literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ENGL 456 – TOPIC IN NINETEENTH-CENTURY AMERICAN LITERATURE AND CULTURE**

3 credits.

Study of a topic in 19th-Century American literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ENGL 457 – TOPIC IN AMERICAN LITERATURE AND CULTURE SINCE 1900**

3 credits.

Study of a topic in American literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 458 – MAJOR AMERICAN WRITER OR WRITERS**

3 credits.

Study of major American writer(s).

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ENGL 459 – THREE AMERICAN NOVELISTS**

3 credits.

Concentrated study of US novelists.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ENGL/CHICLA 460 – BLACK AND LATINX IN LITERATURE AND VISUAL CULTURE**

3 credits.

Chicanxs and Latinxs are frequently imagined in ways that erase the history, presence, and influence of African-descended peoples within these groups. However, this anti-Blackness does not go unanswered in Chicanx and Latinx cultural production. Covers literature, life-writing/autoethnography, visual culture, philosophy/theory, and history that takes up Black Latinx experience and/or that comparatively explores the African American and Latinx convergences, exploring a rich vein of thought and representation in U.S. literatures that is often more transamerican than American and that offers new definitions of both Latinx and Black. Readings on racial paradigms in the Americas, paying attention to the differences between US and Latin American contexts, as well readings on decoloniality, intersectional feminisms, borderlands, and diaspora.

**Requisites:** Declared in Chicana/o and Latina/o Studies (major or certificate) or English major, and sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ENGL 461 – TOPICS IN ETHNIC AND MULTICULTURAL LITERATURE**

3 credits.

Literature in English by authors whose work reflects the experience of ethnic and minority groups.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**ENGL/ASIAN AM 462 – TOPIC IN ASIAN AMERICAN LITERATURE**

3 credits.

Topics will vary. All topics will emphasize the following learning outcomes: awareness of history's impact on the present, ability to recognize and question assumptions, development of critical thinking skills, awareness of relations between self and others, and effective participation in a multicultural society.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL/ASIAN AM/GEN&WS 463 – RACE AND SEXUALITY IN AMERICAN LITERATURE**

3 credits.

Explores the intersection between race and sexuality in American literature with an emphasis on sex/gender difference, feminism, transgenderism, and nationalism. Focuses on the nature of literature as advocacy, with an emphasis on Asian-American issues.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ENGL/ASIAN AM/GEN&WS 464 – ASIAN AMERICAN WOMEN WRITERS**

3 credits.

Major texts by Asian American women writers.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ENGL/ASIAN AM 465 – ASIAN AMERICAN POETRY**

3 credits.

Throughout the history of Asian America, poetry has been a vehicle for the creation and exploration of an Asian American voice; in poetry we can see the continuing struggle over what form Asian American expression will take. Will it follow Asian or European models? Will it employ traditional forms, or experiment in search of new styles? Will it be individual or collective, introspective or political? We will explore these questions through a study of a wide range of Asian American poets from a variety of historical periods and ethnicities, including Janice Mirikitani, Lawson Fusao Inada, Li-Young Lee, John Yau, Myung Mi Kim, and Linh Dinh.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENGL 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. Students may not be concurrently enrolled with ENGL 307, 407, 409, 408, 410, 411, 508, 509, or 695

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**ENGL 473 – TOPIC IN POSTCOLONIAL OR WORLD LITERATURE**

3 credits.

Study of a theme or question in literature that crosses national boundaries, inviting students to think about forces of imperialism and globalization. Specific focus will vary.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ENGL 474 – TOPIC IN CONTEMPORARY LITERATURE**

3 credits.

Study of recent literature written in English. Specific topic will vary.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**ENGL 475 – COMEDY AS GENRE**

3 credits.

Survey of the genre of comedy from antiquity to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL/THEATRE 477 – DIASPORA AND THEATRE**

3 credits.

Study of the drama and theatre of a variety of immigrant communities in three Western locations: Britain, the United States, and Canada. Focuses on current theories of diaspora and transnationalism, the place of theatre in diasporic writing, and the literary, performative, and material dimensions of the genre.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**ENGL/ASIAN 478 – INDIAN WRITERS ABROAD: LITERATURE, DIASPORA AND GLOBALIZATION**

3 credits.

Study of literature, drama, and film produced by authors of South Asian origin in Europe, North America, and the Caribbean. Course considers theories of diaspora, changing patterns of subcontinental migration, and relation of diasporic forms to the cultures of origin and adoption. Not open to students with credit for LCA 478 prior to Fall 2019.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**ENGL 481 – JUNIOR HONORS SEMINAR IN THE MAJOR**

3 credits.

Seminars focus on a variety of topics, usually a theme or a genre which draw upon literature of several periods.

**Requisites:** Sophomore standing and declared in an Honors program**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**ENGL 505 – TOPICS IN COMPOSITION AND RHETORIC**

3 credits.

In-depth intellectual engagement with the perspectives, concerns, and methods of Composition Rhetoric. Topics vary in relation to writing, rhetoric, literacy, and multimodal or digital approaches to any of these.

**Requisites:** Satisfied Communications A requirement and junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**ENGL 508 – CREATIVE WRITING: ADVANCED FICTION WORKSHOP**

3 credits.

Fiction writing.

**Requisites:** ENGL 408 or graduate/professional standing. Students may not be concurrently enrolled with ENGL 307, 407, 408, 409, 410, 411, 469, 509, or 695**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ENGL 514 – ENGLISH SYNTAX**

3 credits.

Syntactic theory as applied to the analysis of English sentences.

**Requisites:** ENGL 314 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 515 – TECHNIQUES AND MATERIALS FOR TESOL**

3 credits.

Supervised practice in the use of current techniques and materials in the teaching of English to speakers of other languages, including peer and community teaching with videotaped sessions.

**Requisites:** ENGL 415**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ENGL 516 – ENGLISH GRAMMAR IN USE**

3 credits.

Functions of English grammar, covering use in a variety of contexts and text types. Involves analysis of spoken and written English across genres and settings.

**Requisites:** ENGL 314 or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ENGL/MEDIEVAL 520 – OLD ENGLISH**

3 credits.

The elements of Old English grammar with selected readings.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/MEDIEVAL 521 – ADVANCED OLD ENGLISH LITERATURE**

3 credits.

An intensive study of a major work or works of Old English, usually focusing on either Beowulf or the poems of a single manuscript. Line-by-line translation of the text will be supplemented by discussion of related issues (whether linguistic, thematic, or contextual) as well as by readings from relevant critical literature. Primary texts will be read in Old English.

**Requisites:** ENGL/MEDIEVAL/ENGL 520

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Honors – Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**ENGL/HIST SCI/MED HIST 525 – HEALTH AND THE HUMANITIES**

3 credits.

Explores how a humanistic perspective can broaden our understanding of health and medicine. Specifically, we will examine the role of language and culture in the creation and circulation of biomedical knowledge; our lived experiences with illness (physical and mental); the intricate intersections of race, gender, sexuality, disability and medicine; the political dimensions of diagnosis, disease, and epidemics, and the role that fiction, creative non-fiction, comics, and film play in shaping our experiences with health and medicine as health care providers and as patients. The course does not assume any background in science or medicine. One of our recurrent topics, in fact, will be to consider how non-experts interact with medicine and its technical vocabularies. Although the primary objective of the course is to understand the cultural, social, and political dimensions of health and medicine, a secondary objective is for students to become more savvy patients and, for the few students who might emerge on the other side of the stethoscope one day, more well rounded health care professionals.

**Requisites:** Declared in the Health and the Humanities certificate

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 531 – HUMANS, NON-HUMANS, POST-HUMANS**

3 credits.

Literary study of the environmental relations between the humans and nonhuman elements of the natural world.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ENGL/ENVIR ST 533 – TOPIC IN LITERATURE AND THE ENVIRONMENT**

3 credits.

Explores the ways that literary texts represent, imagine, and re-imagine the environment.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 537 – SEX, LOVE, AND POWER: TOPIC IN LITERATURE AND SEXUALITY**

3 credits.

Exploration of ways that literary writers and theorists have engaged questions of sexuality.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ENGL/JEWISH 539 – JEWISH LITERATURES IN DIASPORA**

3 credits.

An exploration of Jewish literature in English and in Anglophone contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL 543 – DISCOURSES OF DISABILITY, ANTIQUITY TO 1800**

3 credits.

Concepts of physical disability from antiquity to the Renaissance. Literary theory, philosophy, and history will help frame thinking about how disability is produced. Along with considering how canonical texts represent disabled figures, class will investigate the generic, social, and spatial contexts from which these representations arise.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL 544 – MODERN DISCOURSES OF DISABILITY**

3 credits.

Representations of physical and mental disabilities in fiction, poetry, memoir, drama, and film. Primary emphasis will be on texts produced in English since 1800.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**ENGL/GEN&WS 545 – FEMINIST THEORY AND WOMEN'S WRITING IN ENGLISH**

3 credits.

Feminist theory and women's writing in English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**ENGL 546 – TOPIC IN TRAVEL WRITING BEFORE 1800**

3 credits.

Examination of aspects of travel literature before 1800. It will pay attention to texts written by travelers of many stripes – pilgrims, missionaries, crusaders, counselors, merchants, and dreamers. It will explore how writers narrate relations between the familiar and the strange, the near and far. And it will ask students to consider the relationship of geography to conceptions of personal and collective identity. How do travel writers represent "us" and "them," "self" and "other"? Who claims space, who characterizes it, and on what grounds?

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**ENGL 548 – TOPIC IN LITERATURE AND POLITICS**

3 credits.

Study of a topic in literature and politics.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ENGL 559 – TOPIC IN LITERARY OR CULTURAL THEORY**

3 credits.

An exploration of the methods and principles of criticism; generally an experiment in the application of a particular critical method or a group of related critical presuppositions to an appropriate body of English and American literature. Content varies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 561 – MODERN CRITICAL THEORIES**

3 credits.

Variety and complexity of twentieth century critical thought. Intensive investigation of the works of selected theorists.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ENGL 571 – REMIX, MASHUP, AND DIGITAL DESIGN**

3 credits.

Emerging technologies, from the Internet to computational machines, reshape how we read, write, and think. Explores the significance of these new media technologies, how scholars have theorized digital writing, and how writing can be "remixed" with the use of digital technologies. Produce essays and then remix those essays using various digital technologies, transforming their writing into various forms, including graphic essays, video compositions, audio compositions, and computational media such as video games.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ENGL 572 – SMART MEDIA & CRITICAL INFORMATION DESIGN**

3 credits.

Smart media" or emerging genres of scholarly communication, such as digital storytelling, theory comix, podcasts, Pecha Kucha, and interactive installations.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ENGL/THEATRE 575 – BRITISH DRAMA, 1914 TO PRESENT**

3 credits.

Plays and playwrights from the first World War to the present, including movements leading to the "revolt" of 1956 and subsequent proletarian and absurdist drama. Plays by Shaw, O'Casey, Maugham, Coward, Eliot, Osborne, Beckett, Pinter, Stoppard, Arden, Wesker, Bond, Churchill and others.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL/THEATRE 576 – SURVEY: THEORIES OF DRAMA**

3 credits.

Selected major critical and theoretical sources, from Aristotle to the present day; the influences of theories upon playwriting and modes of theatrical production.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ENGL/THEATRE 577 – POSTCOLONIAL THEATRE: DRAMA, THEORY AND PERFORMANCE IN THE GLOBAL SOUTH**

3 credits.

Study of drama, dramatic theory and theatrical practices in postcolonial cultures, primarily in Asia, Africa and the Caribbean. Considers status of drama/theatre in postcolonial studies and focuses on issues of form, language, intertextuality, trans-culturation, material organization and reception.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ENGL/THEATRE 578 – MODERN AMERICAN DRAMA AND THEATRE**

3 credits.

Representative twentieth-century plays from Glaspell and O'Neill to the present considered within contemporary cultural, theatrical and academic context.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ENGL/JEWISH 593 – LITERATURE OF JEWISH IDENTITY IN AMERICA**

3 credits.

The construction of Jewish American identity within American life.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### ENGL/HIST SCI/MED HIST 599 – DIRECTED STUDY IN HEALTH AND THE HUMANITIES

1 credit.

Offers students enrolled in the Health and the Humanities certificate an opportunity to conduct independent research under the guidance of a faculty member. It allows students who have enrolled in or completed a Health and the Humanities Capstone an opportunity to go into greater depth on a topic covered in the capstone course. In consultation with a faculty member, students will design a project that builds on lessons learned or work completed as part of their capstone experience.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### ENGL 613 – TESOL: PEDAGOGICAL GRAMMAR I

1 credit.

A focus on understanding English grammar from a pedagogical perspective for the purpose of teaching English as a second or foreign language.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ENGL 614 – TESOL: PEDAGOGICAL GRAMMAR II

1 credit.

A focus on understanding English grammar from a pedagogical perspective for the purpose of teaching English as a second or foreign language. The emphasis is on theory and techniques applicable to teaching English grammar.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ENGL 615 – TESOL: TEACHING LISTENING AND SPEAKING

1 credit.

An overview of listening and speaking skills and how to teach them.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ENGL 616 – TESOL: TEACHING OF READING

1 credit.

An overview of reading and vocabulary skills and how to teach them.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENGL 617 – TESOL: TEACHING OF WRITING

1 credit.

Practical modular workshop on key aspects of language teaching, stressing the application of techniques and theory to classroom needs.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENGL 618 – TESOL: TEACHING PRONUNCIATION

1 credit.

An overview of the features of English pronunciation and how to teach them.

**Requisites:** ENGL 415

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENGL 622 – TOPICS IN ENGLISH: STUDY ABROAD

1-6 credits.

A course carried with a UW-Madison Study Abroad Program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2001

### ENGL 651 – SPECIAL TOPICS IN THEATRE AND PERFORMANCE STUDIES RESEARCH

3 credits.

Specialized subjects relevant to the study of the theory, history and criticism of theatre and performance studies.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 653 – APPLIED THEATRE**

3 credits.

Theory and practice of using applied theatre in educational settings to engage audiences (usually students) in important social or cultural issues. Includes readings, research, discussion and the devising, production and performance of a play by the students in the course for community audiences.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**ENGL 654 – DRAMATURGY IN THEORY AND PRACTICE**

3 credits.

Study of the historical, theoretical and practical approaches to theatre and performance dramaturgy. Read and discuss scholarship about the field, and produce dramaturgical research education, production and outreach tasks through diverse written assignments and practical exercises.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ENGL 656 – THEATRE OF THE AVANT-GARDE, 1850-1950**

3 credits.

The development of realistic and post realistic forms in modern and postmodern drama, from Zola, Ibsen, Strindberg and Chekhov through futurism, expressionism, Dada, surrealism, epic theatre, there of the absurd, and contemporary theatre and performance avant-garde works.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**ENGL/AFROAMER 672 – SELECTED TOPICS IN AFRO-AMERICAN LITERATURE**

3 credits.

An intensive analysis of specific themes in the Afro-American experience. Subjects vary with instructor.

**Requisites:** Junior standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 680 – HONORS PROJECT**

3 credits.

For further information, consult the department's Honors Coordinator or Undergraduate Advisor.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 681 – SENIOR HONORS THESIS IN THE MAJOR**

3 credits.

Mentored individual study for students completing honors theses.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 682 – SENIOR HONORS THESIS IN THE MAJOR**

3 credits.

Mentored individual study for students completing honors theses.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 691 – SENIOR THESIS**

3 credits.

Mentored individual study for students completing theses.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 692 – SENIOR THESIS**

3 credits.

Mentored individual study for students completing theses.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**ENGL 695 – DIRECTED CREATIVE WRITING**

3 credits.

Individually directed writing of a poetry or fiction manuscript. Intended for students pursuing the Creative Writing track of the English major. Students ought to have completed three creative writing workshops numbered 300 or above (choose from ENGL 307, ENGL 408, ENGL 409, ENGL 410, ENGL 411, ENGL 508, ENGL 509, ENGL 511) before attempting the class.

**Requisites:** Senior standing and declared in English major. Students may not be concurrently enrolled with ENGL 307, 407, 408, 409, 410, 411, 469, 508, or 509

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 699 – DIRECTED STUDY**

1-3 credits.

Intended for students with Junior or Senior standing who have undertaken previous or concurrent work at intermediate level in same subject. Junior or Senior standing; previous or concurrent work at intermediate level in same subject. Students should consult with the English department's academic advisor before enrolling.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 700 – INTRODUCTION TO COMPOSITION STUDIES**

3 credits.

Rhetorical, linguistic, psychological, and social foundations of writing; implications for instruction.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 701 – WRITING AND LEARNING**

3 credits.

Historical, critical and philosophical perspectives on the relationship between writing and learning. In addition to reviewing current research, students will have the opportunity to carry out their own investigation designed to study possible relationships between writing and learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENGL 702 – PERSPECTIVES ON LITERACY**

3 credits.

Social, historical, and educational perspectives on literacy and literacy learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENGL 703 – RESEARCH METHODS IN COMPOSITION STUDIES**

3 credits.

Introduction to quantitative and qualitative research methods in composition studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/COM ARTS 704 – INTELLECTUAL SOURCES OF CONTEMPORARY COMPOSITION THEORY I-CLASSICAL**

3 credits.

Selected issues in the history of rhetoric, concentrating on classical theories of invention, and their importance for contemporary issues in composition theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ENGL 705 – INTELLECTUAL SOURCES OF CONTEMPORARY COMPOSITION THEORY II-MODERN**

3 credits.

Historical, critical, and philosophical perspectives on the development of composition studies during the modern era, with special emphasis on the 20th Century.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL 706 – SPECIAL TOPICS IN COMPOSITION THEORY**

3 credits.

In-depth treatment of specific problems, questions, themes, authors, texts, or historical periods in composition and rhetoric. Subject will differ each year.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENGL 708 – ADVANCED ENGLISH SYNTAX**

3 credits.

Modern syntactic theory applied to selected areas of English grammar, including the interface between syntax and the lexicon, and morphology.

**Requisites:** ENGL 514 or LINGUIS 330

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ENGL 709 – ADVANCED ENGLISH PHONOLOGY**

3 credits.

Problems of English segmental and suprasegmental phonology, including morphophonemic alterations and stress assignment.

**Requisites:** ENGL 315

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENGL/SOC 710 – INTERACTION ANALYSIS: TALK AS SOCIAL ORGANIZATION**

3 credits.

The study spoken English as a site for social organization. Theoretical foundations and methodological practices for conversation analysis will be explored using videotaped data from English. Content includes current critical trends in analyzing interaction as well as cross-cultural and cross-linguistic perspectives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**ENGL 711 – RESEARCH METHODS IN APPLIED LINGUISTICS**

3 credits.

An introduction to various research paradigms in applied linguistics and second language acquisition. A preparation for critically evaluating published research in applied linguistics and second language acquisition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENGL 713 – TOPICS IN CONTEMPORARY ENGLISH LINGUISTICS**

3 credits.

Study of a topic in contemporary English linguistics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 715 – ADVANCED SECOND LANGUAGE ACQUISITION**

3 credits.

An examination of linguistic, psychological, and sociological theories of second language acquisition and their application to research in syntax, phonology, lexicon, or pragmatics of a second language.

**Requisites:** ENGL 318

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENGL 719 – SUMMER WRITING WORKSHOP**

1-3 credits.

A workshop intended for high school teachers or other post-baccalaureate students. Intended for University Special Students, the class generally does not satisfy requirements for any graduate or undergraduate major in English.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2020

**ENGL 720 – SEMINAR IN EARLY MODERN STUDIES**

2 credits.

Provides an overview of recent scholarly debates in the study of early modernity. Considers two key challenges involved in the study of early modernity: first, what (and when) constitutes early modernity; second, the study of early modernity is necessarily cross-disciplinary. Beginning with the question of what constitutes the "early modern," approach the topic of early modernity from a variety of disciplinary and thematic lenses. The themes include periodization, early modern legal and state formation, women in early modernity, race and early modernity, religion in early modernity, and global early modernities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ENGL 722 – COMPOSITION AND CRITICAL THEORIES**

3 credits.

Study of the relationship between composition and critical theories.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENGL/THEATRE 731 – ADVANCED THEATRE HISTORY 500 BC TO 1700**

3 credits.

Problems of scholarship in the dramatic, performance and staging practices of major traditions of world theatre history between 500 BCE and 1700 including the theatres of ancient Greece and Rome; medieval, Renaissance and early modern Europe; and the Muromachi and Tokugawa eras in Japan.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**ENGL/THEATRE 732 – ADVANCED THEATRE HISTORY 1700 TO PRESENT**

3 credits.

Problems of scholarship in the dramatic, performance and staging practices of major traditions of world theatre history since 1700, including melodrama, naturalism, the avant-garde, and other movements that helped shaped contemporary theatre.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**ENGL/GEN&WS 737 – FEMINIST THEORY AND CRITICISM**

3 credits.

Feminist theory, with an emphasis on literary and cultural theory and criticism in English.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ENGL 780 – CREATIVE WRITING: GRADUATE WORKSHOP**

3 credits.

Professional training in the writing of fiction, poetry, or creative non-fiction. The topic will vary from semester to semester.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 781 – GRADUATE FICTION WORKSHOP**

3 credits.

Students write short stories and novel chapters, critique the work of fellow students and read contemporary fiction.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 782 – GRADUATE POETRY WORKSHOP**

3 credits.

Students write poems, critique the work of fellow students and read contemporary poetry.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ENGL 783 – CREATIVE WRITING PEDAGOGY SEMINAR**

3 credits.

Creative writing pedagogy for MFA in creative writing students.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 785 – MFA THESIS**

3-6 credits.

Thesis hours for MFA creative writing students. Students work to complete a book of short stories, poems or a novel.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 790 – PROSEMINAR IN THE TEACHING OF WRITING**

1 credit.

Introduction to the teaching of writing; guides first-time and prospective teachers in teaching and evaluating a first-year writing class.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 795 – ONE-CREDIT SEMINAR**

1 credit.

Study of a topic in English language and literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 799 – INDEPENDENT READING**

1-6 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

### ENGL 800 – CRITICAL METHODS IN LITERARY STUDIES

3 credits.

A gateway course that introduces students to theories and methods that are important to literary studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENGL/MEDIEVAL 803 – TOPICS IN MEDIEVAL LITERATURE

3 credits.

Study of a topic in Medieval literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ENGL 804 – TOPICS IN EARLY MODERN LITERATURE

3 credits.

Study of a topic in Early modern literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ENGL 805 – TOPICS IN EIGHTEENTH-CENTURY LITERATURE

3 credits.

Selected works, with an emphasis on literary and cultural background.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ENGL 806 – TOPICS IN ROMANTICISM

3 credits.

Study of a topic in Romanticism.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

### ENGL 807 – TOPICS IN VICTORIAN LITERATURE AND CULTURE

3 credits.

Study of a topic in Victorian literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ENGL 808 – TOPICS IN MODERNISM

3 credits.

Study of a topic in Modernism.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### ENGL 810 – TOPICS IN EARLY AMERICAN LITERATURE

3 credits.

Study of a topic in Early American literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

### ENGL 811 – TOPICS IN NINETEENTH-CENTURY AMERICAN LITERATURE AND CULTURE

3 credits.

Study of a topic in 19th-Century American literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

### ENGL 812 – TOPICS IN AMERICAN LITERATURE SINCE 1900

3 credits.

Study of a topic in American literature since 1900.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

### ENGL 813 – WORLD AND/OR POSTCOLONIAL LITERATURE IN ENGLISH

3 credits.

Literatures in English with origins outside Britain and the United States; theories and/or histories in postcolonial, Anglophone, and/or world literatures in English. Topics will vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ENGL 814 – TOPICS IN CONTEMPORARY LITERATURE

3 credits.

Study of a topic in contemporary literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENGL 816 – TOPICS IN ETHNIC AND MULTICULTURAL LITERATURE**

3 credits.

Study of a topic in ethnic and multicultural literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**ENGL 817 – SEMINAR-AMERICAN LITERATURE**

3 credits.

Study of a theme in American literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ENGL 820 – TOPICS IN POETRY**

3 credits.

Study of a topic in poetry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**ENGL 822 – TOPICS IN LITERARY AND CULTURAL THEORY**

3 credits.

Study of a topic in literary theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 825 – TOPICS IN LITERATURE AND THE ENVIRONMENT**

3 credits.

Study of a topic in literature and the environment.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**ENGL 826 – TOPICS IN DIGITAL STUDIES**

3 credits.

Study of a topic in digital studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**ENGL 828 – TOPICS IN MATERIAL CULTURE**

3 credits.

Study of a topic in material cultures.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**ENGL 829 – TOPICS IN MIGRATION AND DIASPORA**

3 credits.

Study of a topic in migration diaspora as they relate to literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ENGL 830 – TOPICS IN PRINT CULTURE AND HISTORY OF THE BOOK**

3 credits.

Study of a topic in print culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**ENGL 850 – PROSEMINAR IN THEATRE RESEARCH**

3 credits.

Provides a foundation for postgraduate theatre and performance research by examining the methods used in the study of theatre and performance. It considers how criticism, theory, historiography and other methods have been employed in analysis of performance. It also discusses professional issues around working in theatre and performance studies as a teacher, scholar, dramaturge or applied theatre practitioner.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENGL 851 – ADVANCED STUDIES IN THEATRE AND PERFORMANCE STUDIES RESEARCH**

3 credits.

Specialized subjects relevant to the graduate-level study of the theory, history, criticism and literature of theatre and performance studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021

**ENGL 859 – SEMINAR-INTERDISCIPLINARY THEATRE STUDIES**

2-3 credits.

Topics related to advanced research in theatre and performance studies.  
Topics vary by semester.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENGL 879 – ADVANCED SEMINAR IN LITERARY STUDIES**

3 credits.

Study of a topic or theme in literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**ENGL 900 – TOPICS IN COMPOSITION STUDY**

3 credits.

Study of a topic in composition studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**ENGL 905 – SEMINAR-TOPICS IN APPLIED ENGLISH LINGUISTICS**

3 credits.

Study of a topic in applied English linguistics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**ENGL 906 – SEMINAR-THE ENGLISH LANGUAGE**

3 credits.

Study of a theme in the English language.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**ENGL 990 – DISSERTATION RESEARCH IN ENGLISH**

1-12 credits.

In connection with the doctoral thesis. Consult graduate advisor.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENGL 999 – INDEPENDENT READING FOR PHD PRELIMS**

1-12 credits.

Consult graduate advisor. For students who have completed English Ph.D. course requirements.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## ENGLISH AS A SECOND LANGUAGE (ESL)

**ESL 110 – INTENSIVE ENGLISH AS A SECOND LANGUAGE**

4-6 credits.

Listening, speaking, reading, and writing skills for nonnative speakers of English; academically oriented. Not open to auditors

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2020**ESL 113 – ESSENTIALS OF ACADEMIC READING AND WRITING**

3 credits.

Improvement of listening, speaking, reading, writing and grammar skills that are essential in an academic setting. Introduction to the expectations for an undergraduate at a U.S. university.

**Requisites:** Enrolled in the International Student Summer Institute**Repeatable for Credit:** No**Last Taught:** Summer 2022**ESL 114 – INTERMEDIATE ENGLISH LANGUAGE SKILLS**

3 credits.

Semi-intensive course in intermediate English language skills. A multi-skills focus on reading, writing, and communication skills essential in an academic setting. Not open to auditors

**Requisites:** Placement into ESL 114**Repeatable for Credit:** No**Last Taught:** Fall 2022**ESL 115 – GRAMMAR FOR ACADEMIC USE**

3 credits.

A review of English grammar through intensive written and oral practice to promote accurate and appropriate language use for students who have already studied grammar extensively and need to refine the ability to produce acceptable academic English. Not open to auditors

**Requisites:** ESL 114 or placement into ESL 115**Repeatable for Credit:** No**Last Taught:** Fall 2022



**ESL 116 – ACADEMIC READING AND VOCABULARY SKILLS**

3 credits.

Reading strategies for academic work; reading with increased comprehension and speed, vocabulary expansion, and summary writing. Not open to auditors.

**Requisites:** ESL 115 or placement into ESL 116**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 117 – ACADEMIC WRITING I**

3 credits.

Basic elements of academic writing, emphasizing improved fluency and accuracy, paragraph structure, summarizing and paraphrasing, short essays, and a final research project. Not open to auditors.

**Requisites:** ESL 116 or placement into ESL 117**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 118 – ACADEMIC WRITING II**

3 credits.

Academic writing, critical reading and argumentation, documentation, and style and organization of research papers; oral communication skills for effective class participation and presentations. Not open to auditors.

**Requisites:** ESL 117 or placement into ESL 118**Course Designation:** Gen Ed - Communication Part A

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 328 – ACADEMIC SKILLS WORKSHOPS**

1-3 credits.

Academic skills for ESL students; workshops on skills required for effective academic communication; topics vary, but include general and discipline-specific academic skills. Intended for graduate students. Not open to auditors

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ESL 343 – ORAL COMMUNICATION SKILLS**

3 credits.

Practice in formal and informal communication skills, including listening comprehension, pronunciation, and conversational and presentation skills useful in an academic setting. Not open to auditors

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 344 – ACADEMIC PRESENTATIONS AND DISCUSSION**

2-3 credits.

Oral communication and presentation skills essential for participation in seminars, conferences, and other academic and professional settings. Not open to auditors

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ESL 345 – AMERICAN ENGLISH PRONUNCIATION**

1 credit.

Techniques for improvement of the pronunciation of American English for non-native speakers of English. Not open to auditors

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 349 – ACADEMIC WRITING FOR GRADUATE STUDENTS**

2-3 credits.

Aspects of research writing, including data presentation, literature review, summarizing, critical summarizing, and discussion. Grammar and editing skills are also emphasized. Not open to auditors

**Requisites:** Graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ESL 350 – PROFESSIONAL AND ACADEMIC WRITING SKILLS**

2-3 credits.

Workshop approached to writing students' fields, including dissertations, articles and research reports. Also covers general writing skills, documentation and genre-specific styles. Not open to auditors

**Requisites:** Graduate/professional standing**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ESL 352 – ENGLISH FOR LAWYERS**

3 credits.

Opportunities to express ideas through oral presentations and formal written work. Focus on specific topics in law. Not open to auditors

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**ESL 370 – INTERNATIONAL TA TRAINING**

0-2 credits.

Focuses on the communication skills, classroom culture, and teaching strategies essential for effective classroom teaching at an American university. Not open to auditors

**Requisites:** Graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Spring 2023

## ENTOMOLOGY (ENTOM)

### ENTOM/AGROECOL/AGRONOMY/C&E SOC/ENVIR ST 103 – AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE

3 credits.

Agroecology has blossomed across the world in recent decades as not only a science, but also a practice, and a movement. Employ the multiple disciplines and perspectives that Agroecology affords to analyze our agricultural and food systems within a broader context of dynamic social and ecological relationships.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENTOM/ENVIR ST 201 – INSECTS AND HUMAN CULTURE-A SURVEY COURSE IN ENTOMOLOGY

3 credits.

Importance of insects in the environment, emphasizing beneficial insects, disease carriers, and agricultural pests that interfere with the food supply. Environmental problems due to insect control agents.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENTOM/AGRONOMY/NUTR SCI 203 – INTRODUCTION TO GLOBAL HEALTH

3 credits.

Introduces students to global health concepts through multidisciplinary speakers dedicated to improving health through their unique training. It targets students with an interest in public health and those who wish to learn how their field impacts their global issues.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENTOM/ENVIR ST 205 – OUR PLANET, OUR HEALTH

3 credits.

An introduction to the multiple determinants of health, global disease burden and disparities, foundational global health principles, and the overlap between ecosystem stability, planetary boundaries, and human health. Explore the core fundamentals of global health scholarship, including but not limited to infectious disease, sanitation, and mental health, and also consider ecological perspectives on these issues through the lens of planetary boundaries. Attention is placed on how human-mediated global change (e.g. climate change, biodiversity loss, land-use patterns, geochemical cycling, agricultural practice) impacts human health and the ecosystem services we depend on. An overview of pertinent issues in sustainability science and planetary health discourse, including the 'Anthropocene' and resilience to understand and critically assess global trends.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENTOM 289 – HONORS INDEPENDENT STUDY

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area of Entomology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2005

### ENTOM 299 – INDEPENDENT STUDY

1-3 credits.

Research work for students under direct guidance of a faculty member in an area of Entomology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ENTOM/ZOOLOGY 302 – INTRODUCTION TO ENTOMOLOGY

4 credits.

Principles including morphology and classification.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENTOM 321 – PHYSIOLOGY OF INSECTS**

3 credits.

Anatomy, histology and basic physiology of organ systems in insects.

**Requisites:** ENTOM/ZOOLOGY/ENTOM 302 or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**ENTOM 331 – TAXONOMY OF MATURE INSECTS**

4 credits.

Principles of taxonomy, identification and taxonomic morphology of adult insects.

**Requisites:** ENTOM/ZOOLOGY/ENTOM 302 or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ENTOM/M M & I/PATH-BIO/ZOOLOGY 350 – PARASITOLOGY**

3 credits.

The biology of water-borne, food-borne, soil-borne and vector-borne parasites of animals including humans. Parasites are explored in the context of transmission, associated disease, diagnosis and treatment options, and environmental, cultural and socioeconomic drivers of disease epidemiology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY 153, or BIOCORE 381**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENTOM 351 – PRINCIPLES OF ECONOMIC ENTOMOLOGY**

3 credits.

Major economic insects: identification, life histories, bionomics, distribution, control; procedures in fundamental and practical inquiry.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, ZOOLOGY 153, or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENTOM/AGRONOMY/HORT/PL PATH/SOIL SCI 354 – DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF FIELD CROPS**

1 credit.

Provides students with information necessary to diagnosis and monitor corn, soybean, alfalfa and wheat for pests (insects, weeds, diseases) and nutrient deficiency symptoms including perspectives from Agronomy, Entomology, Horticulture, Plant Pathology and Soil Science. Proper soil and pest sampling information will be provided as will proper cropstaging techniques which are essential for pest and nutrient management.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2019**ENTOM/ZOOLOGY 371 – MEDICAL ENTOMOLOGY**

3 credits.

Arthropods of medical and veterinary importance, how they affect their hosts and transmit diseases.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, ZOOLOGY 153, or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ENTOM 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENTOM 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Entomology and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2017**ENTOM 400 – STUDY ABROAD IN ENTOMOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions

**ENTOM 432 – TAXONOMY AND BIONOMICS OF IMMATURE INSECTS**

4 credits.

Covers anatomy/morphology, taxonomy, and bionomics of immature insects (ordinal and familial levels). Identification of insects (order and family) using taxonomic keys.

**Requisites:** ENTOM/ZOOLOGY/ENTOM 302 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENTOM 450 – BASIC AND APPLIED INSECT ECOLOGY**

3 credits.

Covers population and community ecology, plant-insect interactions, insect biodiversity and biogeography, and applied ecology. Weaves basic ecological theory and principles with their application to entomological problems such as conservation, biological control, agriculture, and insect-vectored diseases of plants and humans. Uses current entomological and ecological scientific literature and draws on examples from a broad range of natural and managed ecosystems. Broadens from pairwise species interactions (e.g., a predator and its prey) to the entire community of organisms and their physical environment. Emphasizes the theoretical principles and historical background underlying the various topics with a link to potential applications in agriculture, conservation, pest management, and/or invasion biology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENTOM 451 – BASIC AND APPLIED INSECT ECOLOGY LABORATORY**

1 credit.

Hands-on experiences such as labs, field trips, computer exercises, and discussions based on readings in the primary literature to enhance and delve into more details on materials introduced in ENTOM 450.

**Requisites:** ENTOM 450 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**ENTOM 468 – STUDIES IN FIELD ENTOMOLOGY**

3 credits.

Concentration on structural, behavioral adaptations of insects to diverse habitats; dynamic relations between insects and plants, other animals and other insects.

**Requisites:** ENTOM/ZOOLOGY/ENTOM 302

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**ENTOM/BOTANY/ZOOLOGY 473 – PLANT-INSECT INTERACTIONS**

3 credits.

Multiple ways in which arthropods exploit plants, plant traits that deter or augment insects, environmental mediation of these interactions, effects on population dynamics, community ecology and co-evolution, and implications to natural resource management, environmental quality, and sustainable development.

**Requisites:** ZOOLOGY/BOTANY/F&W ECOL/BOTANY/ZOOLOGY 460, ENTOM/F&W ECOL/ENTOM 500, PL PATH/BOTANY/ENTOM/BOTANY/PL PATH 505, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENTOM 490 – BIODIVERSITY AND GLOBAL CHANGE**

3 credits.

Explores the impact of global environmental change on biodiversity and the subsequent consequences for ecosystem function and human well-being. Examines species response to these environmental changes, such as migration, adaptation, and extinction, and the implications for the delivery of ecosystem services and planetary health. Applies ecological principles to identify and evaluate practical solutions to pressing environmental challenges.

**Requisites:** (ZOOLOGY/BIOLOGY/ZOOLOGY 101, ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151, BIOLOGY/BOTANY/BIOLOGY 130, ZOOLOGY 153, BIOCORE 381, ENVIR ST/ATM OCN/GEOSCI/ATM OCN/ENVIR ST 102, ENVIR ST/ILS/ENVIR ST 126, ENVIR ST/ GEOG/ENVIR ST 120, 127, or 139) and (MATH 112, 114, 171, or placement into MATH 221) or grad/prof standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### ENTOM/F&W ECOL 500 – INSECTS IN FOREST ECOSYSTEM FUNCTION AND MANAGEMENT

2 credits.

Roles of insects in the functioning of healthy forest ecosystems, tactics for addressing challenges they pose to sustainable natural resource management, and emerging issues such as biological invasions, habitat alteration, and climate change that influence interactions among insects, their microbial associates, forests, and humans.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### ENTOM/BOTANY/PL PATH 505 – PLANT-MICROBE INTERACTIONS: MOLECULAR AND ECOLOGICAL ASPECTS

3 credits.

Molecular and ecological aspects of the interactions between plants and microorganisms. Explores many of the themes, from genetic to integrative, of modern biology, and illustrates how study of plant-microbe interactions contributes to understanding of fundamental plant science.

**Requisites:** MICROBIO 303, GENETICS 466, 468, BIOCHEM 501, 508, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENTOM/ZOOLOGY 540 – THEORETICAL ECOLOGY

3 credits.

Introduction to theoretical ecology, including hands-on experience in computer modeling.

**Requisites:** FW ECOL/HORT/STAT/F&W ECOL/HORT 571

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### ENTOM 570 – SYSTEMS THINKING IN GLOBAL HEALTH

3 credits.

A systems approach to examination of the multiple determinants of health and well-being. Case studies and group projects explore complex issues including, but not limited to, the root causes of infectious and noncommunicable disease, health inequities in the context of global change, and trade-offs in addressing global and planetary health problems, particularly where information is incomplete, projections about future states are uncertain, or social equity concerns must be taken into account as scientific knowledge is applied. Group projects emphasize systems thinking to critically assess global issues. Teamwork and communication skills are required for case study analysis and project management.

**Requisites:** ENTOM/ENVIR ST/ENTOM 205

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENTOM 601 – SEMINAR IN METHODS OF SCIENTIFIC ORAL PRESENTATIONS

1 credit.

Training for the presentation of short talks.

**Requisites:** Senior standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### ENTOM/F&W ECOL/PL PATH/SOIL SCI 606 – COLLOQUIUM IN ENVIRONMENTAL TOXICOLOGY

1 credit.

Current topics in molecular and environmental toxicology and problems related to biologically active substances in the environment. Topics vary each semester. Lectures are by resident and visiting professors and other researchers.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 or BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**ENTOM/GENETICS/ZOOLOGY 624 – MOLECULAR ECOLOGY**

3 credits.

Basic principles of molecular ecology. Lecture topics include population genetics, molecular phylogenetics, rates and patterns of evolution, genome evolution, and molecular ecology.

**Requisites:** GENETICS 466, 467, BIOCORE 383, or graduate student standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENTOM/AGRONOMY/F&W ECOL/M&ENVTOX 632 – ECOTOXICOLOGY: THE CHEMICAL PLAYERS**

1 credit.

Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment.

**Requisites:** (CHEM 341 or 343) and ((BIOLOGY/BOTANY/BIOLOGY 130 and BIOLOGY/ZOOLOGY/BIOLOGY 102) or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 383); or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ENTOM/AGRONOMY/F&W ECOL/M&ENVTOX 633 – ECOTOXICOLOGY: IMPACTS ON INDIVIDUALS**

1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates).

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 632

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ENTOM/AGRONOMY/F&W ECOL/M&ENVTOX 634 – ECOTOXICOLOGY: IMPACTS ON POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

1 credit.

Focuses on the impact of toxicants on populations, communities, ecosystems, and includes risk evaluation. Includes lectures, current research presentations, and discussions.

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 633 or declared in Molecular and Environmental Toxicology, PhD program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ENTOM 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for undergraduate students in an Honors program completing a thesis in the area of Entomology, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENTOM 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Entomology, as arranged with a faculty member. ENTOM 681

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENTOM 691 – SENIOR THESIS**

2 credits.

Individual study for undergraduate students completing a thesis in the area of Entomology, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ENTOM 699 – SPECIAL PROBLEMS**

1-4 credits.

Individual advanced work in an area of Entomology under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENTOM 701 – ADVANCED TAXONOMY**

3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022



### ENTOM/F&W ECOL 711 – MULTIVARIATE ANALYSIS OF ECOLOGICAL AND COMMUNITY DATA

2 credits.

Examines common methods of multivariate data analysis in ecology and environmental science. Covers methods for the analysis of complex, multidimensional datasets that are collected in the study of plant, invertebrate, fish, and bird communities. Addresses the concurrent analysis of the environmental factors that may drive community distributions. Provides the basis for predictive modeling of distributions across landscapes. General methods covered include ordination (PCA, DCA, NMDS, CCA), clustering (or classification), and other comparative analyses of data matrices (ANOSIM, Mantel tests). Includes an applied, "hands-on" approach on how to use these tools, and the circumstances under which their uses are either appropriate or inappropriate.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENTOM 799 – PRACTICUM IN ENTOMOLOGY TEACHING

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ENTOM 801 – COLLOQUIUM

1 credit.

Provides exposure to current research in Entomology. Weekly speakers represent diverse career backgrounds.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENTOM/BOTANY/GENETICS/ZOOLOGY 820 – FOUNDATIONS OF EVOLUTION

2 credits.

Explore some of the most important themes and debates that have permeated evolutionary biology over the last 50 years. Read key papers related to each controversial topic, debate the pros and cons of competing viewpoints, and reflect on the relevance of the issue to contemporary evolutionary biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENTOM 875 – SPECIAL TOPICS

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### ENTOM 901 – SEMINAR IN ORGANISMAL ENTOMOLOGY

1 credit.

Presentations from the original literature on developments in natural products chemistry, biochemistry, physiology, developmental biology and/or ultrastructure of insects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ENTOM/AGRONOMY/ATM OCN/BOTANY/ENVIR ST/F&W ECOL/ GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENTOM 990 – GRADUATE RESEARCH AND THESIS

1-12 credits.

Independent laboratory research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## ENVIRONMENTAL STUDIES – GAYLORD NELSON INSTITUTE (ENVIR ST)

### ENVIR ST/F&W ECOL 100 – FORESTS OF THE WORLD

3 credits.

Ecology and conservation of a wide range of forests, from tropical rain and dry forests, boreal forests, to temperate forests, outside of the USA. The main threats to forests, and different strategies to solve conservation and sustainable management issues in international forestry. Trade-offs in forest conservation and management, resulting from different values that people place on forests, issues in equity and equality in access to forest resources. The role of forests in climate change and extinction of species.

**Requisites:** None

**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENVIR ST/SOIL SCI 101 – FORUM ON THE ENVIRONMENT

1-2 credits.

Lectures and discussions about environmental issues. Historical and contemporary environmental impacts of humans on the biosphere. Global futures: population, technology, societal values, resources and prospects for sustainable management.

**Requisites:** None

**Course Designation:** Breadth – Either Social Science or Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### ENVIR ST/ATM OCN/GEOSCI 102 – CLIMATE AND CLIMATE CHANGE

3 credits.

Describes the basic climate principles governing the climate system. It describes the climate and climate variability at present, climate evolution in the past, and the projected climate change into the future. The scientific principles underlying the natural and anthropogenic greenhouse effect and climate model forecasts are elucidated.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### ENVIR ST/AGROECOL/AGRONOMY/C&E SOC/ENTOM 103 – AGROECOLOGY: AN INTRODUCTION TO THE ECOLOGY OF FOOD AND AGRICULTURE

3 credits.

Agroecology has blossomed across the world in recent decades as not only a science, but also a practice, and a movement. Employ the multiple disciplines and perspectives that Agroecology affords to analyze our agricultural and food systems within a broader context of dynamic social and ecological relationships.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENVIR ST/GEOSCI 106 – ENVIRONMENTAL GEOLOGY

3 credits.

Application of geology to problems resulting from the ever more intense use of the earth and its resources.

**Requisites:** Not open to students with credit for GEOSCI 100

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENVIR ST 112 – ENVIRONMENTAL STUDIES: SOCIAL SCIENCE PERSPECTIVES

3 credits.

Explores different social science approaches to interpreting the relationship between environment and society at various scales, from the local to the global. Traces the social origins of environmental concerns, their social impacts, and the different responses they engender.

**Requisites:** Not open to students with credit for ENVIR ST/GEOG/ENVIR ST 337

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST 113 – ENVIRONMENTAL STUDIES: ENVIRONMENTAL HUMANITIES**

3 credits.

What do we really mean when we use the word, environment, in interdisciplinary Environmental Studies, and how important is it to have our environment be meaningful? Considers five popular understandings, while also offering a global perspective on environmental humanities. Introduction to key American texts (Carson, Kimmerer, Leopold, etc.) and key concepts (like sustainability and the Anthropocene), along with core skills from fields like philosophy, ethics, literature, fine arts, history, politics and anthropology. Cases in environmental experience and expression range from Wisconsin to Asia, and across biotic and abiotic environments. Through discussions and assignments, answer fundamental questions about science, nature, environmental problems and crisis, and how to relate to others in our world as human beings.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST 115 – ENVIRONMENTAL HUMANITIES: ASIAN/PACIFIC PERSPECTIVES**

3-4 credits.

Offers a case-based approach to environmental studies from a humanistic perspective, taking into account diverse and connected transnational systems of Asia; materials draw on themes like forests, water, disaster, war, and conservation and wildlife. Introduces disciplines in the Environmental Humanities (literature, religion, music, etc.) through studies in tradition, theory and practice across South Asia, Southeast Asia, East Asia and ocean and Pasifik regions including Aotearoa, New Zealand. Investigate how environmental worldviews cast as the basis for action and understanding in the present?

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ENVIR ST 117 – GREENHOUSE ROOTS SEMINAR**

1 credit.

Challenges Greenhouse residents to think deeply about themselves and their place in the social and biophysical communities of which they are a part. Read some classic and provocative essays to help engage the meaning(s) of "sustainability" and to consider how our lifestyle and career choices impact other people and the environment. Discover the deep history of sustainability in Wisconsin and to learn more about current sustainability initiatives on the UW-Madison campus and in the greater Madison Area.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST/GEOG 120 – INTRODUCTION TO THE EARTH SYSTEM**

3 credits.

Introduction to how the Earth system works and what makes Earth livable. Gain appreciation for how the atmosphere, oceans, life, and earth's surface interact to shape our local, regional and global landscapes.

**Requisites:** Not open to students with credit for GEOG/ENVIR ST/ GEOG 127**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/HIST SCI/HISTORY 125 – GREEN SCREEN: ENVIRONMENTAL PERSPECTIVES THROUGH FILM**

3 credits.

From Teddy Roosevelt's 1909 African safari to the Hollywood blockbuster King Kong, from the world of Walt Disney to The March of the Penguins, cinema has been a powerful force in shaping public and scientific understanding of nature throughout the twentieth and twenty-first century. How can film shed light on changing environmental ideas and beliefs in American thought, politics, and culture? And how can we come to see and appreciate contested issues of race, class, and gender in nature on screen? Explore such questions and come to understand the role of film in helping to define the contours of past, present, and future environmental visions in the United States, and their impact on the real world struggles of people and wildlife throughout the world.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**ENVIR ST/ILS 126 – PRINCIPLES OF ENVIRONMENTAL SCIENCE**

4 credits.

Relates principles of environmental science to our daily activities, with an eye to sustainability, conservation, and systems thinking. Introduces science as a process of inquiry and discovery rather than just a pre-established set of facts. Topics relate to energy, water, and land use, and include food, electric power, materials, buildings, transportation, and waste.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ENVIR ST/GEOG 127 – PHYSICAL SYSTEMS OF THE ENVIRONMENT**

5 credits.

Climatic regimes, landforms, soils, waters and life forms at the earth's surface in terms of energy-transforming processes, locational patterns, and changes through time.

**Requisites:** Not open to students with credit for GEOG/ENVIR ST/ GEOG 120

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/GEOG 139 – GLOBAL ENVIRONMENTAL ISSUES**

3 credits.

Explores the global and local nature of environmental problems, including issues of climate change, food, energy, globalization, deforestation, biodiversity loss, resource access, environmental justice, and population. Considers how we should analyze and act on environmental problems as we confront the apparently daunting scale of such issues. What appear to be single global environmental issues are actually composed of many smaller, context-specific, and place-dependent problems or conflicts. Through an interdisciplinary and geographic perspective, these issues can be understood and addressed at the scale of our lived lives.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/ENGL 153 – LITERATURE AND THE ENVIRONMENT**

3 credits.

An introduction to literature in English about the natural world and humankind's relationship with it; specific topics will vary.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST/ATM OCN 171 – GLOBAL CHANGE: ATMOSPHERIC ISSUES AND PROBLEMS**

2-3 credits.

Atmospheric problems of global significance. Greenhouse warming, ozone layer, acid rain, climate change. Study based on elementary principles of atmospheric science. Systems approach applied to changing atmospheric composition. Interactions among geochemical cycles, anthropogenic inputs and other parts of the environment.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST 199 – DIRECTED STUDY**

1-3 credits.

Independent work in environmental studies overseen by a qualified instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST/ENTOM 201 – INSECTS AND HUMAN CULTURE-A SURVEY COURSE IN ENTOMOLOGY**

3 credits.

Importance of insects in the environment, emphasizing beneficial insects, disease carriers, and agricultural pests that interfere with the food supply. Environmental problems due to insect control agents.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST 202 – CAREERS IN THE ENVIRONMENT**

2 credits.

Explores the varied career opportunities for environmental professionals. Features discussions with environmental professionals, supplemented with in-class training on job hunting and professional preparation.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST 203 – SPECIAL TOPICS IN ENVIRONMENTAL STUDIES**

1-3 credits.

Specific topics will vary, within the scope of environmental studies.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ENVIR ST/ENTOM 205 – OUR PLANET, OUR HEALTH**

3 credits.

An introduction to the multiple determinants of health, global disease burden and disparities, foundational global health principles, and the overlap between ecosystem stability, planetary boundaries, and human health. Explore the core fundamentals of global health scholarship, including but not limited to infectious disease, sanitation, and mental health, and also consider ecological perspectives on these issues through the lens of planetary boundaries. Attention is placed on how human-mediated global change (e.g. climate change, biodiversity loss, land-use patterns, geochemical cycling, agricultural practice) impacts human health and the ecosystem services we depend on. An overview of pertinent issues in sustainability science and planetary health discourse, including the 'Anthropocene' and resilience to understand and critically assess global trends.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST/GNS 210 – CULTURES OF SUSTAINABILITY: CENTRAL, EASTERN, AND NORTHERN EUROPE**

3 credits.

Exploration of the ideals and realities of sustainability in Central, Northern and East European contexts. Cultural, historical, environmental and other perspectives on sustainability on a local and global scale.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**ENVIR ST/HIST SCI 213 – GLOBAL ENVIRONMENTAL HEALTH: AN INTERDISCIPLINARY INTRODUCTION**

3 credits.

Provides an introduction to the intersections of health and environment on a global scale. Exposes students to a range of problems in global environmental health, including climate change, disease ecology, and the globalization of disease.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/GEOG/SOIL SCI 230 – SOIL: ECOSYSTEM AND RESOURCE**

3 credits.

Soils are fundamental to ecosystem science. A systems approach is used to investigate how soils look and function. Topics investigated include soil structure, biology, water, fertility, and taxonomy as well as the human impact on the soil environment.

**Requisites:** Not open to students with credit for SOIL SCI 301**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/A A E 244 – THE ENVIRONMENT AND THE GLOBAL ECONOMY**

4 credits.

The "economic way of thinking" about global and regional environmental issues. Topics include climate change, biodiversity preservation, ocean fisheries, environmental impacts of international trade, poverty and the environment, and sustainability.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST 250 – INTRODUCTION TO SUSTAINABILITY SCIENCE**

3 credits.

Introduces issues connected with "Sustainability Science," the study of coupled human-natural systems with implications for resource use, human well-being, and the environment. Methods include risk assessment, life-cycle assessment, and conceptual modeling, as well as basic background on natural systems such as climate, water, and land use, and engineered systems including energy, transportation, land use, and materials.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015

**ENVIR ST 251 – ECOLOGY AND THE GLOBAL ENVIRONMENT**

3 credits.

Ecology is the study of relationships in the natural world, many of which are increasingly being altered by human activities. These disruptions modify the environment on a global scale, affecting populations and communities of plants, animals, and other organisms, and making Earth increasingly inhospitable for life, including for humans. Explore the natural world and humans' role within it, as both instigators and managers of global environmental change.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ENVIR ST/ILS 255 – INTRODUCTION TO SUSTAINABILITY SCIENCE**

4 credits.

Explore the foundations of sustainability using the UW-Madison campus as a living laboratory. Ground your feet on the UW-Madison campus and ask questions about the energy we use, the food we eat, the air we breathe, the land we occupy, the goods we purchase, and the waste we create. A blend of environmental sciences and studies. Use principles of chemistry, physics, and biology to understand the dynamics of our human and earth systems, but also explore societal issues like public health and social justice, all through the context of sustainability and the UW-Madison campus community.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**ENVIR ST/BOTANY/ZOOLOGY 260 – INTRODUCTORY ECOLOGY**

3 credits.

The relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/RELIG ST 270 – THE ENVIRONMENT: RELIGION & ETHICS**

3-4 credits.

What are sources on which members of religious communities draw in order to understand and address environmental change? Explores how religious persons and communities confront global environmental questions and challenges today, with case studies drawn from culturally and religiously plural societies such as India and Indonesia. Introducing diverse varieties of Christianity, Islam, and Hindu and Buddhist systems, gives overview of some approaches in the environmental humanities related to philosophy, history, sociology and anthropology, and ethics.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**ENVIR ST/ENGL 305 – RHETORIC, SCIENCE, AND PUBLIC ENGAGEMENT**

3 credits.

Focuses on theoretical and practical aspects of public engagement with scientific research, policy, and management, with an emphasis on writing, rhetoric, and scientific discourse.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**ENVIR ST/AMER IND 306 – INDIGENOUS PEOPLES AND THE ENVIRONMENT**

3 credits.

Indigenous peoples often have very close relationships to ancestral homelands, species and natural resources. However, definitions of "indigenous" can be controversial and highly politicized. Diverse outlooks on identities, worldviews and environmental governance clarify the complex meanings of indigeneity in the US. Highlights American Indian perspectives, conservation practices, and policy environments through consideration of US and international case studies. American Indian experiences shed light on pressing issues of resource sustainability and sovereignty, and demonstrate linkages to global Indigenous environmental issues and strategies.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**ENVR ST 307 – LITERATURE OF THE ENVIRONMENT: SPEAKING FOR NATURE**

3 credits.

19th and 20th century British and American literature.

**Requisites:** Sophomore, junior, or senior standing only**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ENVR ST 308 – OUTDOORS FOR ALL: INEQUITIES IN ENVIRONMENTALISM**

3 credits.

National parks, wilderness, and monuments that are set aside for recreational enjoyment are disproportionately underutilized by African Americans, Hispanics, Asians and Native Americans for reasons that are inextricably linked to past and present racial discrimination. Broadening access and participation in outdoor recreation requires a clear understanding of this history, as well as an appreciation of the continuing efforts by people of color to reassert their right to the outdoors. Gain a clear understanding of the sociocultural circumstances that have created disparities among the U.S. population in citizens' ability to access and enjoy public land and the efforts that aim to address them.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ENVR ST/GEOG 309 – PEOPLE, LAND AND FOOD: COMPARATIVE STUDY OF AGRICULTURE SYSTEMS**

3 credits.

Introduction to how and why humans have transformed natural landscapes around the world, including tropical deforestation. Exploration of different agricultural systems, and topics such as food security, land scarcity, bioenergy and the impacts of food production on the environment.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVR ST/ZOOLOGY 315 – LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES**

2 credits.

General limnology. Physical, chemical and biological characteristics and processes of lakes. Environmental problems and rehabilitation of lakes.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381 or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVR ST 317 – COMMUNITY ENVIRONMENTAL SCHOLARS PROGRAM SEMINAR**

1 credit.

Provides opportunities for students in the Community Environmental Scholars Program to analyze the connections among environmental issues and community engagement. Requires work with community-based environmental and/or sustainability-related organizations. Student cohorts design and lead classes and projects and have opportunities to host guest speakers and environmental leaders. Emphasizes the professional skills needed to work effectively individually, in teams, in internships, and in professional positions.

**Requisites:** Junior or senior standing only**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENVR ST/ATM OCN/GEOG 322 – POLAR REGIONS AND THEIR IMPORTANCE IN THE GLOBAL ENVIRONMENT**

3 credits.

Reviews the past, present, and future of the Arctic and Antarctic regions. Covers the history, geography, atmospheric and ocean circulations, permafrost, ice sheets, glaciers, and future state of the Arctic and Antarctica as projected by earth system models. Also explores the role of the polar regions in the earth's system and associated global climatic feedbacks.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ENVIR ST/SOIL SCI 324 – SOILS AND ENVIRONMENTAL QUALITY**  
3 credits.

Interaction of soils with environmental contaminants and the role of soils in pollution control.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENVIR ST 326 – SUSTAINABILITY TOOLS: SYSTEMS THINKING & LIFE CYCLE ASSESSMENT**  
3 credits.

Explores fundamentals of systems thinking and how to apply a systems-based approach to understanding and addressing sustainability issues ranging from climate change to environmental racism. Systems content is complemented with foundational skills in life cycle assessment (LCA), an inherently systems-based application of sustainability science that considers the full measure of resources used and waste created throughout the cradle-to-grave supply chain of a product or process. Life cycle and systems-based approaches are used to characterize both human and natural systems in local and global contexts. These approaches also will be integrated with sustainability concepts including the triple bottom line, industrial ecology, and the circular economy. Concepts include: life cycle stages, supply chains, stocks, flows, feedback loops, and unintended consequences.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/HISTORY 328 – ENVIRONMENTAL HISTORY OF EUROPE**  
3 credits.

Explores a new approach to a part of the world with a very old history, but one that is now as 'modern' as any. The changing, complex relations between Europeans and their environments from antiquity to the twenty-first century offer instructive comparison with American and current global environmental concerns. Approaching Mediterranean and Western civilizations from an environmental viewpoint also offers fresh perspective on these enduring cultures.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/ATM OCN/GEOG 332 – GLOBAL WARMING: SCIENCE AND IMPACTS**  
3 credits.

Offers a fundamental understanding of how and why global warming is happening and what to expect in the future. Investigate and discuss the evidence for change, the science that explains these observations, predicted impacts on humans and ecosystems, and the societal debate over proposed solutions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/GEOG 333 – GREEN URBANISM**  
3 credits.

Over half of the world's population now lives in urban areas, with an expected increase of 2.5 billion people in the next 30 years. As urbanization (broadly defined as the conversion of previously undeveloped lands into urbanized uses) continues and intensifies, we are faced with a number of environmental issues, for instance, fragmentation and destruction of habitats, and decreased air and water quality. Explore how urbanization impacts ecological processes and resulting environmental outcomes, strategies for "designing with nature," and behavioral, planning, and policy responses to urban environmental problems.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/ATM OCN/GEOG/GEOSCI 335 – CLIMATIC ENVIRONMENTS OF THE PAST**  
3 credits.

Climate change at timescales from the last several million years to the last 100 years, with emphasis on more recent timescales. Examines how climate variability arises from interplay between external forcings, feedbacks within the earth system, and (more recently) human activity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/GEOG 337 – NATURE, POWER AND SOCIETY**

3 credits.

Explores the links between nature, power and society in today's world. Considers the complex relationships between humans and the earth's resources, including food, energy, physical materials, water, biota, and landscapes. Examines issues linked to population and scarcity, resource tenure, green consumerism, political economy, environmental ethics, risks and hazards, political ecology, and environmental justice.

**Requisites:** Sophomore standing. Not open to students with credit for ENVIR ST 112

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/GEOG 339 – ENVIRONMENTAL CONSERVATION**

4 credits.

Examines major environmental conservation approaches in the U.S. and developing countries and how they are influenced by sociopolitical factors, cultural values and scientific understandings of nature. Historical and contemporary cases are explored with emphasis on biodiversity and climate change issues.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/AMER IND 341 – INDIGENOUS ENVIRONMENTAL COMMUNICATORS**

3 credits.

Native Nations show leadership globally in addressing major environmental issues. Indigenous languages describe deep relationships with the natural world, including information on environmental stewardship - harvesting, caretaking and reciprocity. Indigenous scholars contribute crucial perspectives to conversations about human relationships to the Earth - cultural relationships to wildlife and plants, and the ethical and practical roles of humans in socio-ecological systems. Focuses on indigenous environmental scholarship, including the ongoing legacy of oral traditions, developing research, writing, and public speaking skills.

**Requisites:** Satisfied Communications A requirement and sophomore standing, or graduate/professional standing

**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/A A E/ECON 343 – ENVIRONMENTAL ECONOMICS**

3-4 credits.

Microeconomic principles underlying the use of natural resources such as air, water, forests, fisheries, minerals and energy. These principles are applied in the examination of pollution control, preservation vs. development, deforestation, and other environmental issues.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/AMER IND/GEOG 345 – MANAGING NATURE IN NATIVE NORTH AMERICA**

3 credits.

Surveys the concepts, practices, and issues associated with natural resource management in American Indian communities.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENVIR ST 349 – CLIMATE CHANGE GOVERNANCE**

3 credits.

Climate change is being felt, and addressed, at every level of society, from the individual to the global scale. Examine efforts to mitigate climate change. Learn about initiatives that are being implemented through international treaties; national, state, and municipal government policies; corporate programs; and individual behavior. Examine the advantages and disadvantages of each approach, their successes, and the obstacles they have faced. Evaluate various forms of climate activism as a means of pushing for meaningful action on climate change.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/HIST SCI 353 – HISTORY OF ECOLOGY**

3 credits.

The development of the science of ecology and related scientific issues and social attitudes, with a primary emphasis on developments from the late nineteenth century to the present.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ENVIR ST/ATM OCN 355 – INTRODUCTION TO AIR QUALITY**

3 credits.

Links chemistry and meteorology to engineering, law, policy, and public health. Presents key ideas in air quality, with focus on reactive pollutants in the outdoor environment, especially gas and particle phase chemicals that react with human tissue to cause sickness and death. Discusses environmental impacts of these pollutants and regulatory approaches for their control in the U.S. and around the world. Indoor air quality will be included. Non-reactive pollutants, especially carbon dioxide, will be compared and contrasted with reactive air pollutants.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/HIST SCI/RELIG ST 356 – ISLAM, SCIENCE & TECHNOLOGY, AND THE ENVIRONMENT**

3–4 credits.

Survey of Muslim religious understandings of science, technology, nature and environment. Gain a global perspective through case studies, covering sources such as the Qur'an, theology and law, and traditions of esoteric piety (mysticism), and historical and contemporary issues like medical ethics, virtual realities, and environmental change, challenge and crisis.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**ENVIR ST/F&W ECOL/ZOOLOGY 360 – EXTINCTION OF SPECIES**

3 credits.

A comprehensive treatment of the ecology, causes, and consequences of species extinction. Ecology and problems of individual species, habitat alteration and degradation, socio-economic pressures and conservation techniques and strategies.

**Requisites:** Sophomore standing and BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 151, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BOTANY/BIOLOGY/BOTANY 130, or (BIOCORE 381 and 382)**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST/LAND ARC 361 – WETLANDS ECOLOGY**

3 credits.

Types, origins, settings, and structure of wetlands. Physical, biological, and cultural values, uses and assessments. Physical and biological characteristics and dynamics. Protection, management and restoration.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/ BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, ZOOLOGY 153, (BIOCORE 381 and 382), BOTANY/BIOLOGY/BOTANY 130, or graduate/ professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/BSE 367 – RENEWABLE ENERGY SYSTEMS**

3 credits.

Learn about the state-of-the-art in renewable energy applications including biomass for heat, electric power and liquid fuels as well as geo-energy sources such as wind, solar, and hydro power. Practice engineering calculations of power and energy availability of renewable energy sources and learn about requirements for integrating renewable energy sources into production, distribution and end-use systems.

**Requisites:** MATH 112, 114, 217, placement into MATH 221, or graduate/ professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/HISTORY 369 – THINKING THROUGH HISTORY WITH ANIMALS**

3–4 credits.

Explores the history of human relationships with animals around the world with focus on agriculture and hunting, political economic development, human identity, and biological science and conservation.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019

### **ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI/LAND ARC 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**

3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI/LAND ARC 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/F&W ECOL/GEOG/G L E/GEOG/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### **ENVIR ST 375 – FIELD ECOLOGY WORKSHOP**

3 credits.

Hands-on field study for intensive study of behavior of plants and animals and their relationship to environments and human impacts. Individual and group observations, measurements, interpretation, reports, typing personal experience with specifics to basic principles.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **ENVIR ST/CIV ENGR/GEOG 377 – AN INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS**

4 credits.

Design, implementation and use of automated procedures for storage, analysis and display of spatial information. Covers data bases, information manipulation and display techniques, software systems and management issues. Case studies.

**Requisites:** Sophomore standing, member of Engineering Guest Students, or declared in Capstone Certificate in GIS Fundamentals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ENVIR ST 398 – INDEPENDENT STUDY: SUSTAINABILITY COMMUNITY ENGAGEMENT**

1 credit.

Provides an opportunity to learn about community engagement and link sustainability concepts to working with a community organization. Declared in the Sustainability Certificate or Environmental Studies Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ENVIR ST 399 – DIRECTED STUDY**

1-3 credits.

Independent work in environmental studies overseen by a qualified instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **ENVIR ST 400 – SPECIAL TOPICS IN THE ENVIRONMENT: BIOLOGICAL ASPECTS OF ENVIR ST**

1-4 credits.

Topics covered within the scope of the environmental biological sciences, such as conservation biology, environmental ecology, issues in ethnobotany and tropical ecology, environmental health, ecotoxicology, biodiversity, endangered resources, biological systems analysis, and field studies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST 401 – SPECIAL TOPICS: ENVIRONMENTAL PERSPECTIVES IN THE PHYSICAL SCIENCES**

1-4 credits.

Topics covered within the scope of the physical environmental sciences, such as issues in energy resources, environmental measurement and analysis, modeling, remote sensing and GIS, environmental engineering and transportation, air and water resources, and global climate change.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENVIR ST 402 – SPECIAL TOPICS: SOCIAL PERSPECTIVES IN ENVIRONMENTAL STUDIES**

1-4 credits.

Topics covered within the scope of environmental social sciences, such as issues in environmental policy, law, economics, land use, sustainability, food systems, energy policy, conflict resolution, environmental justice, and international development.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENVIR ST 403 – SPECIAL TOPICS IN ENVIRONMENTAL STUDIES**

1-3 credits.

Specific topics will vary, within the scope of environmental studies.

**Requisites:** Sophomore standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**ENVIR ST 404 – SPECIAL TOPICS IN ENVIRONMENTAL HUMANITIES**

1-3 credits.

Topics covered within the scope of environmental humanities, such as themes in environmental ethics, literature, art, film, aesthetics and design, history, and indigenous knowledge.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**ENVIR ST/C&E SOC/CURRIC 405 – EDUCATION FOR SUSTAINABLE COMMUNITIES**

3 credits.

How can education – for children and adults, in school and out – help to address crucial environmental and social sustainability challenges? What ideas and strategies have guided environmental and sustainability education over the years? What can individual people do to address environmental challenges, and what can only be accomplished by people working together? What does sustainability have to do with justice – and vice versa? Examine the principles behind behavior change and empowerment, community action and whole-scale social reform. Drawing on research and theory from across the social sciences, we will explore the uncertain relationship between education and advocacy, seeking the means by which education can have the greatest impact without compromising the core ideals of a democratic society.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/GEOSCI 411 – ENERGY RESOURCES**

3 credits.

A critical examination of the full spectrum of renewable and nonrenewable energy options, from the unifying perspective of the Earth systems that govern their use. Energy conversion and efficiency, consumption patterns and trends, and environmental consequences of energy production and use.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST 413 – PRESERVING NATURE**

3 credits.

Understand the theory and practice the skills of effective, scientific, ethical, and legitimate preservation of nature (biodiversity, the atmosphere, water, etc.). Learn from global lessons in how to intervene against threats to nature, and the roles of ethics, law, and research in preserving nature. Gain mastery of terminology and usage so as to communicate professionally about nature preservation.

**Requisites:** Sophomore standing or BOTANY/ENVIR ST/ZOOLOGY/ BOTANY/ENVIR ST 260**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**ENVIR ST 417 – SUSTAINABILITY SCIENCE, TECHNOLOGY AND POLICY**

1 credit.

Analyze the concept of sustainability through current trends, including energy, air and water resources, agriculture, environmental measurement and analysis, modeling, remote sensing, Geographic Information Systems, the built environment, transportation, ecology, conservation and global climate change.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/HISTORY/LEGAL ST 430 – LAW AND ENVIRONMENT: HISTORICAL AND CONTEMPORARY PERSPECTIVES**

3 credits.

Explores environmental studies through a focus on law and legal history. Although its main concentration is on U.S. environmental law, the course will begin and end with broader historical and global perspectives.

Topics include a survey of English, European, and early American legal approaches to land use, natural resources, and pollution through World War II as well as an examination of the development and practice of contemporary U.S. environmental law and consideration of the recent emergence of international environmental law.

**Requisites:** Sophomore standing**Course Designation:** Gen Ed - Communication Part B

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/C&E SOC/GEOG 434 – PEOPLE, WILDLIFE AND LANDSCAPES**

3 credits.

Explores the relationship between humans and wildlife amid diverse landscapes, both historic and contemporary, tropical and temperate. Investigates how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**ENVIR ST/GEOG 439 – US ENVIRONMENTAL POLICY AND REGULATION**

3-4 credits.

Covers a broad cross-section of American environmental policy by focusing on specific statutes and policy arenas. Surveys the basic elements of American environmental policy and regulation with a particular focus on the specific people, sites and scales at which environmental decision-making happens through primary-source case material. Maintains a dual focus on (a) the legal and regulatory aspects of environmental regulation and (b) the specific geographic and social features of actual cases in which regulations and policy are used. Understanding environmental outcomes in a complex society depends on observing both the structure of regulations and the geographic and social context in which such regulations emerge.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST/PHILOS 441 – ENVIRONMENTAL ETHICS**

3-4 credits.

Adequacy of ethical theories in handling such wrongs as harm to the land, to posterity, to endangered species, and to the ecosystem itself. Exploration of the view that not all moral wrongs involve harm to humans. Inquiry into the notion of the quality of life and the ethics of the "lifeboat" situation.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**ENVIR ST/CIV ENGR/G L E/GEOSCI 444 – PRACTICAL APPLICATIONS OF GPS SURVEYING**

2 credits.

Global positioning system surveying for field applications. Signals. Coordinate systems. Datums. Cartographic projections. Satellite orbits. Choosing hardware. Strategies for data collection and analysis. Assessing uncertainty. Geocoding satellite images. Integrating data with Geographic Information Systems. Emerging technologies.

**Requisites:** MATH 211, 217, 221, 275, or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ENVIR ST/SPANISH 445 – CULTURE AND THE ENVIRONMENT IN THE LUSO-HISPANIC WORLD**

3 credits.

Investigates how economy and culture work together, consuming and/or restoring their environments in divergent scenarios of the Hispanic World.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/ECON/POLI SCI/URB R PL 449 – GOVERNMENT AND NATURAL RESOURCES**

3-4 credits.

Problems of public policy and administration for development and use of natural resources.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**ENVIR ST/GEOG/HISTORY 460 – AMERICAN ENVIRONMENTAL HISTORY**

4 credits.

Survey of interactions among people and natural environments from before European colonization to present. Equal attention to problems of ecological change, human ideas, and uses of nature and history of conservation and environmental public policy.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/HISTORY 465 – GLOBAL ENVIRONMENTAL HISTORY**

3-4 credits.

Explores the history of human relationships with the environment on a global scale through analysis of long-term changes, from early civilizations, to the beginnings of global trade, the Industrial Revolution, urbanization, and 20th century technological developments. Offers first-hand historiographical research experience and training in writing for public web audiences.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/GEOG/HISTORY 469 – THE MAKING OF THE AMERICAN LANDSCAPE**

4 credits.

Surveys the historical geography and environmental history of the United States by tracing the evolution of the American landscape from precolonial times to the present, with special emphasis on developing skills to interpret landscape history.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ENVIR ST/POP HLTH 471 – INTRODUCTION TO ENVIRONMENTAL HEALTH**

3 credits.

Impact of environmental problems on human health; biological hazards to human health from air and water pollution; radiation; pesticides; noise; problems related to food, occupation and environment of the work place; accidents. Physical and chemical factors involved.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/PHYSICS 472 – SCIENTIFIC BACKGROUND TO GLOBAL ENVIRONMENTAL PROBLEMS**

3 credits.

Designed to provide those elements of physics, atmospheric sciences, chemistry, biology and geology which are essential to a scientific understanding of global environmental problems. Specific examples of such problems include global warming, stratospheric ozone depletion, acid rain and environmental toxins.

**Requisites:** PHYSICS 103, 201, 207, 247, CHEM 103, 108, 109, 115, 116, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### ENVIR ST/CLASSICS 488 – GREEKS, ROMANS AND THE NATURAL ENVIRONMENT

3 credits.

Examine ways in which the ancient Greeks and Romans interacted with their Mediterranean environments and the various conceptions of the natural world that they developed in poetry, prose and visual art. Explore a number of general topics that will underpin the course as a whole: the characteristics of the Mediterranean environment, the effect of nature on humankind, and the impact of humankind on nature. Study aspects of Greek and Roman engagements with nature, such as agriculture, hunting, sacrifice, the contested relationship between the natural and the civilized, and representations of human beings using terms drawn from the natural world ("bears" of Artemis, cannibalistic "wolves"). Consider how these aspects of the ancient world relate to modern treatments of such themes. (NB: All Greek and Latin texts will be read in English translation.)

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### ENVIR ST/POP HLTH 502 – AIR POLLUTION AND HUMAN HEALTH

3 credits.

Toxicologic, controlled and epidemiologic studies on major air pollutants. Overview of study methods, lung physiology and pathology; air pollution sources, types, meteorology, sampling methods, controls and regulations.

**Requisites:** Junior standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ENVIR ST 506 – MODELING AND ANALYSIS OF ENVIRONMENTAL SYSTEMS

3 credits.

Systems modeling; applications to environmental problems; systems methods.

**Requisites:** Senior standing

**Course Designation:** Breadth – Natural Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### ENVIR ST/ZOOLOGY 510 – ECOLOGY OF FISHES

3 credits.

Interactions of fishes with their physical, chemical, and biotic environment; physiological ecology, community ecology and fisheries sciences. Lake Mendota perch fishery and Shedd Aquarium field trips.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENVIR ST/ZOOLOGY 511 – ECOLOGY OF FISHES LAB

2 credits.

Anatomy and taxonomy of Wisconsin fishes and projects in fish ecology.

**Requisites:** ZOOLOGY/ENVIR ST 510 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ENVIR ST/F&W ECOL 515 – NATURAL RESOURCES POLICY

3 credits.

Examine natural resources policy and law in the United States relating to forests, wildlife, and other natural resources. Investigates the policy-making process and the role of science, values, property, economics, and justice in the development of federal and state resources policy. Practice professional written and oral communication and ethical engagement in resources policy and administration.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/ATM OCN 520 – BIOCLIMATOLOGY**

3 credits.

How climate systems and biological organisms operate and interact at the global scale and the implications of this for climate change, ecosystem ecology and human land use.

**Requisites:** (ATM OCN 101, ATM OCN/ENVIR ST/ATM OCN 171, or ATM OCN/GEOG/ATM OCN 323), (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 102, BIOCORE 381, or 485), and junior standing, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/PHILOS 523 – PHILOSOPHICAL PROBLEMS OF THE BIOLOGICAL SCIENCES**

3 credits.

Problems raised by genetics, evolutionary theory, and taxonomy: patterns of explanatory force and dispensability of teleology; objectivity of taxonomy.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENVIR ST/ATM OCN/GEOG 528 – PAST CLIMATES AND CLIMATIC CHANGE**

3 credits.

Climatic change throughout geologic time, especially in the last 10 millennia; mechanisms of change, evidence, and criteria, paleogeography and paleoclimatology, climate models.

**Requisites:** Junior standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ENVIR ST/GEOG/LAND ARC/URB R PL 532 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING**

3 credits.

Explores planning-related Geographic Information System (GIS) data, applications, analytical tools, and implementation issues.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/ENGL 533 – TOPIC IN LITERATURE AND THE ENVIRONMENT**

3 credits.

Explores the ways that literary texts represent, imagine, and re-imagine the environment.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST/GEOG 534 – ENVIRONMENTAL GOVERNANCE: MARKETS, STATES AND NATURE**

3 credits.

Covers real-world questions of how the environment is managed and governed through state policy, economics, and social institutions. Includes strategies within and outside of the formal institutions of government, and extends the discussion to the commodification of nature and the use of science to understand and govern the environment. Also includes case studies of environmental governance in water, carbon, species, and urban sustainability.

**Requisites:** Sophomore standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ENVIR ST/ATM OCN 535 – ATMOSPHERIC DISPERSION AND AIR POLLUTION**

3 credits.

Physical principles of atmospheric transport processes. Variation of transport in time and place. Local and regional concentrations of pollutants. Environmental implications of air pollution and control strategies.

**Requisites:** MATH 234 or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ENVIR ST/GEOG 537 – CULTURE AND ENVIRONMENT**

4 credits.

Geographic approaches to culture-nature relationships, including human perception of, use of, and adaptation to the physical environment, with emphasis on traditional subsistence systems; selected topics from contemporary and historical sources.

**Requisites:** GEOG 359, GEOG/ENVIR ST/GEOG 337, 339, 439, GEOG/ENVIR ST/AMER IND/ENVIR ST/GEOG 345, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/C&E SOC/SOC 540 – SOCIOLOGY OF INTERNATIONAL DEVELOPMENT, ENVIRONMENT, AND SUSTAINABILITY**

3 credits.

Sociological analysis of relationships among economic growth, environmental sustainability and social justice in the developing world. Considers frameworks for understanding poverty, hunger, educational and technological inequality, and the impact of globalization on prospects for socially and ecologically sustainable development.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/CIV ENGR/LAND ARC 556 – REMOTE SENSING DIGITAL IMAGE PROCESSING**

3 credits.

Techniques of enhancement and quantification of remote sensing imagery. Emphasis on processing and analyzing data gathered by airborne and satellite sensors. Techniques to quantitatively analyze data from photography, electro-optical scanners, satellite systems, and radar and passive microwave systems. Applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/GEOG 557 – DEVELOPMENT AND ENVIRONMENT IN SOUTHEAST ASIA**

3 credits.

Examines the political, socio-cultural, economic and ecological aspects of contemporary development and human-environment relations in mainland Southeast Asia, applying a critical and theoretically informed perspective, and focusing largely on rural issues.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/A A E/CIV ENGR/URB R PL 561 – ENERGY MARKETS**

3 credits.

Energy resources are an essential element of the world's business, political, technical and environmental landscape. Analytic tools provided by the discipline of economics expands our understanding of this critical issue. Energy supply markets reviewed include both fossil fuels and renewable resources. Energy demand sectors include residential, commercial, industrial and transportation. Electricity represents an intermediate energy market. The interactions among these markets participants indicate how scarce resources are allocated among competing needs in the world economy.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**ENVIR ST/SOIL SCI 575 – ASSESSMENT OF ENVIRONMENTAL IMPACT**

3 credits.

Overview of methods for collecting and analyzing information about environmental impacts on agricultural and natural resources, including monitoring the physical environment and relating impacts to people and society.

**Requisites:** Junior standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/LAND ARC 581 – PRESCRIBED FIRE: ECOLOGY AND IMPLEMENTATION**

3 credits.

Covers the use of live fire in land management and provides a background in fire ecology, fire behavior, fire effects, and the prediction of fire behavior for wetland, prairie and savanna fuels. Instruction includes field training with live fire exercises and the use of fire management equipment. Participate in prescribed burns outside of scheduled class times. Confers certificates of completion that qualify an individual to participate on prescribed fire crews with public and private sector organizations.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST 600 – ENVIRONMENTAL STUDIES CAPSTONE**

3 credits.

Interdisciplinary investigation with an emphasis on real world challenges. Examine environmental issues and apply, often in a team context, a variety of academic perspectives and methodologies, and cultivate academic and professional abilities such as establishing connections within the larger community, developing strategies for analyzing and addressing problems, developing field skills in ecosystems, and working with others trained in fields different from one's own.

**Requisites:** Junior or senior standing only**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ENVIR ST 602 – SUSTAINABILITY IN PRACTICE: CAPSTONE**

3 credits.

An integrative capstone experience involving interdisciplinary teams applying the triple bottom line principals of sustainability to local, regional and global challenges.

**Requisites:** Junior or senior standing only**Repeatable for Credit:** No**Last Taught:** Spring 2015**ENVIR ST 613 – REPRODUCIBILITY AND OPEN SCIENCE IN ECOLOGICAL RESEARCH**

3 credits.

Why trust science? Examine critically the strengths and weaknesses of Western science in light of new efforts at overcoming the reproducibility crisis. Examine successes and failures in fostering open science focusing on ecological research in its broadest sense, although relevant to many fields of inquiry. In line with the mission of the Nelson Institute for Environmental Studies, take an interdisciplinary look at reproducibility and scientific integrity. Find out why and why not to rely on the scientific communications of individual researchers and interest groups that showcase their preferred evidence.

**Requisites:** Junior standing**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ENVIR ST/BOTANY/F&W ECOL/ZOOLOGY 651 – CONSERVATION BIOLOGY**

3 credits.

Application of ecological principles and human dimensions to the conservation of biological diversity. Topics: biodiversity science; conservation planning; population ecology; habitat loss, species exploitation, invasive species, pollution; human attitudes and activities as they affect the biosphere; approaches to monitoring interventions.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BOTANY/ZOOLOGY/BOTANY 450, BOTANY/F&W ECOL/BOTANY 455, BOTANY/F&W ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**ENVIR ST/A A E/F&W ECOL 652 – DECISION METHODS FOR NATURAL RESOURCE MANAGERS**

3-4 credits.

Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests.

**Requisites:** A A E 215, ECON 101, or 111**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



### **ENVIR ST/URB R PL 668 – GREEN POLITICS: GLOBAL EXPERIENCE, AMERICAN PROSPECTS**

3 credits.

An examination of the writings and activities of green parties and movements around the globe in order to assess the potential of an explicit, radical environmental politics for the United States.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **ENVIR ST/A A E/ECON/URB R PL 671 – ENERGY ECONOMICS**

3 credits.

The method, application, and limitations of traditional economic approaches to the study of energy problems. Topics include microeconomic foundations of energy demand and supply; optimal pricing and allocation of energy resources; energy market structure, conduct, and performance; macro linkages of energy and the economy; and the economics of regulatory and other public policy approaches to the social control of energy.

**Requisites:** Graduate/professional standing or (senior standing and A A E 215, ECON 101, or 111)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **ENVIR ST 681 – SENIOR HONORS THESIS**

3 credits.

Independent study for undergraduate students completing an Honors thesis in Environmental Studies.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **ENVIR ST 682 – SENIOR HONORS THESIS**

3 credits.

Independent study for undergraduate students completing an Honors thesis in Environmental Studies.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ENVIR ST 691 – SENIOR THESIS**

1-3 credits.

Independent study for undergraduate students completing a thesis in Environmental Studies.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **ENVIR ST 692 – SENIOR THESIS**

1-3 credits.

Independent study for undergraduate students completing a thesis in Environmental Studies.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### **ENVIR ST/LAND ARC/SOIL SCI 695 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN NATURAL RESOURCES**

3 credits.

Course has four components: 1) Detailed review of GIS concepts; 2) Case studies; 3) GIS implementation methods; 4) Laboratory to provide "hands-on" GIS experience.

**Requisites:** LAND ARC 211 or GEOG/CIV ENGR/ENVIR ST/CIV ENGR/ GEOG 377 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **ENVIR ST 699 – DIRECTED STUDY**

1-3 credits.

Independent work in environmental studies overseen by a qualified instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **ENVIR ST/CIV ENGR/URB R PL 717 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR I**

1 credit.

The first of two seminars for planning the activities of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/CIV ENGR/URB R PL 718 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR II**

2 credits.

The second of two seminars for planning the field work, analysis, and reporting of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/CIV ENGR/URB R PL 719 – WATER RESOURCES MANAGEMENT SUMMER PRACTICUM**

4 credits.

Interdisciplinary team of students and staff working with agency personnel, citizen groups, and/or private sector representatives on the analysis of a contemporary, problem-oriented water resource issue. Physical, biological, economic and social aspects of the issue analyzed. Comprehensive written report results, practicum's findings and management recommendations.

**Requisites:** ENVIR ST/CIV ENGR/URB R PL/CIV ENGR/ENVIR ST 718

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ENVIR ST/AGROECOL/AGRONOMY 724 – AGROECOSYSTEMS AND GLOBAL CHANGE**

3 credits.

Impacts of global change drivers (climate change, atmospheric chemistry, bioenergy, urbanization, policy) on agroecosystems and their associated goods and services; environmental impacts of agricultural land use and feedbacks to climate; modeling approaches; critical review of current scientific literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ENVIR ST/POP HLTH 739 – CLIMATE CHANGE, HUMAN AND PLANETARY HEALTH**

2 credits.

Provide tools to identify and address real-world global environmental health issues, stemming from climate change, habitat destruction leading to disease spillover events, food insecurity, and urban design.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/ATM OCN 745 – METEOROLOGICAL SATELLITE APPLICATIONS**

2-3 credits.

Use of satellite imagery and measurements in meteorological research and operations; orbital characteristics; navigation; instrumentation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/ATM OCN/GEOSCI/ZOOLOGY 750 – PROBLEMS IN OCEANOGRAPHY**

3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/CIV ENGR 772 – PRACTICUM IN TRANSPORTATION MANAGEMENT AND POLICY**

3 credits.

Integrative capstone course in transportation management and policy. Interdisciplinary team experience in the application of theoretical knowledge and analytical tools for developing policy and making management decisions on "real-world" problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ENVIR ST/PUB AFFR/URB R PL 809 – INTRODUCTION TO ENERGY ANALYSIS AND POLICY**

3 credits.

Strategy and policy problems in energy policy, both national and international.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENVIR ST/PUB AFFR/URB R PL 810 – ENERGY ANALYSIS AND POLICY CAPSTONE**

3 credits.

Interdisciplinary application of energy knowledge to an analysis project for a real-world client. Integrate and apply technical, economic, political, and social factors in energy decision-making.

**Requisites:** Declared in Energy Analysis and Policy Graduate/Professional Certificate or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVR ST/URB R PL 821 – RESOURCES POLICY ISSUES: REGIONAL AND NATIONAL**

2-3 credits.

Resource policy issues frequently faced by local and state governments and the federal government. Emphasis: (1) techniques for analysis of resource issues; (2) methods of collating knowledge from natural and social science disciplines which can make meaningful contributions to resolution of resource issues; (3) identification and analysis of strategic points of decision making in the legislative and executive branches of government; and (4) the application of planning techniques for accomplishing resource goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**ENVR ST/JOURN/LSC 823 – SCIENCE AND ENVIRONMENT COMMUNICATION**

3 credits.

Tracks the evolution of mass media coverage of science and the environment. Emphasis on how journalists utilize evidence, the influence of scientific and journalistic norms on stories, and the effects of mass media on science and environment messages to the public.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ENVR ST/URB R PL 843 – LAND USE POLICY AND PLANNING**

3 credits.

Critical evaluation and analysis of land use policies and programs in relation to comprehensive planning and growth management issues in the U.S. The role of legislative and judicial processes and emerging public land use social values and philosophies in the development, regulation, and effectuation of innovative land use policies. Alternative land policy and growth guidance systems of select European countries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENVR ST/URB R PL 865 – WATER RESOURCES INSTITUTIONS AND POLICIES**

3 credits.

Governmental processes and policies for water resources management: major substantive problems and issues; political processes of decision making; problems of governmental organization and intergovernmental arrangements.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVR ST/POLI SCI/PUB AFFR 866 – GLOBAL ENVIRONMENTAL GOVERNANCE**

3 credits.

In-depth examination of the political and policy challenges posed by global environmental degradation. Analysis of international institutions for managing the global environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**ENVR ST/A A E/POP HLTH/PUB AFFR 881 – BENEFIT-COST ANALYSIS**

3 credits.

Presents the welfare economics underpinnings for evaluating the social benefits and costs of government activities. Issues such as uncertainty, the social discount rate, and welfare weights will be discussed; case studies from the environmental, social policy, and agricultural areas will be studied.

**Requisites:** Graduate/professional standing and (PUB AFFR 818 and 880), or ISY E/POP HLTH/ISY E 875, or A A E 635

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVR ST 900 – SEMINAR**

1-3 credits.

Special topics selected with each offering.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVR ST 901 – GRADUATE ORIENTATION SEMINAR**

1 credit.

Introduction to the organizational structure, policies and practices of the Nelson Institute, with an emphasis on the opportunities and challenges of being a student in a cross-campus interdisciplinary program.

**Requisites:** Declared in the Environment and Resources or Water Resources Management graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST 909 – PROFESSIONAL SKILLS IN ENERGY ANALYSIS AND POLICY**

1 credit.

Discussion of professional skills important to interdisciplinary professionals in energy analysis and policy. Exploration of diverse career pathways and personal career development goals. Includes presentations from practitioners in public, private, and non-profit sectors.

**Requisites:** Declared in the Energy Analysis and Policy graduate/professional certificate

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENVIR ST/ATM OCN/BOTANY/CIV ENGR/GEOSCI/ZOOLOGY 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST/URB R PL 917 – PUBLIC PARTICIPATION FOR PLANNING AND POLICY MAKING**

3 credits.

Examines public participation for planning and policymaking in both urban and natural environments; considers different types of participation from agency consultation to negotiation; designing, conducting, and evaluating citizen participation are major features.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ENVIR ST 922 – HISTORICAL AND CULTURAL METHODS IN ENVIRONMENTAL RESEARCH**

3 credits.

Introduction to other disciplinary and interdisciplinary methods studying past environmental change and the human cultural contexts within which such change occurs. Explore the disparate forms of evidence that can be used to reconstruct past environmental changes and their human meanings. Build a strong sense of community among graduate students and faculty members at UW-Madison who share an interest in past environmental change by creating a context within which students from different programs can work together.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST/URB R PL 923 – SEMINAR-LAND PROBLEMS: INSTITUTIONAL DEVELOPMENT**

2-3 credits.

Land tenure and utilization research and policy problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**ENVIR ST/ATM OCN 925 – SEMINAR-CLIMATOLOGY**

1-2 credits.

Historical climatology with emphasis on the last few centuries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**ENVIR ST 931 – REMOTE SENSING FOR INTERNATIONAL DEVELOPMENT**

3 credits.

Explore the ways remote sensing data are being used within an international development context, broadly defined. Provides a unique focus on understanding how projects were completed with satellite data, what data sources were necessary, how expert local knowledge was incorporated, and how various challenges were faced and overcome. Discover how the application of remote sensing data helped change policy in different countries across the globe.

**Requisites:** ENVIR ST/FW ECOL/G L E/GEOG/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371 and graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST/CURRIC 932 – FOUNDATIONS OF ENVIRONMENTAL AND SUSTAINABILITY EDUCATION**

3 credits.

Education is often portrayed as a critical part of the solution to the intertwined problems of environment and society. Examines environmental education and related traditions such as nature study, conservation education, and outdoor education, as well as more recent movements such as place-based education and education for sustainability. Grounds discussions in concrete examples of educational practice, considers historical and contemporary critiques of environmental education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVR ST 950 – ENVIRONMENTAL MONITORING SEMINAR**

2 credits.

A discussion and exploration of the social, economic and legal interactions of geospatial and environmental information technologies with society.

**Requisites:** Declared in Environmental Conservation: Environmental Observation and Informatics MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENVR ST 951 – CONSERVATION OF BIODIVERSITY**

3 credits.

Surveys the scientific knowledge, concepts, and models that are the basis for the applied practice for the conservation of biodiversity. Study interactions of humans with nature, and how conservation science is used to formulate policy and guide conservation actions.

**Requisites:** Declared in Environmental Conservation: Environmental Conservation MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENVR ST/AGRONOMY/ATM OCN/BOTANY/ENTOM/F&W ECOL/ GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVR ST 956 – ADVANCED ENVIRONMENTAL REMOTE SENSING**

3 credits.

Focuses on the fundamental physical principles of terrestrial remote sensing, followed by an examination of advanced topics in earth observation and digital image processing. Topics include radiation interaction with the atmosphere and the surface; radiative transfer theory; land surface characteristics including energy balance; thermal sensing; atmospheric and radiometric correction of image data; automated cloud detection and removal. Applications of remote sensing data for environmental problems will be explored in depth, including biophysical remote sensing with 3D modeling of vegetation canopies, dense time series analysis, data mining techniques, data fusion, as well as object vs. per-pixel approaches to pattern recognition. Explores all major data types, including optical, RADAR, LiDAR, and hyperspectral data, and provide instruction in hands-on image processing using open source software.

**Requisites:** ENVR ST/FW ECOL/G L E/GEOG/GEOSCI/LAND ARC/ ENVR ST/F&W ECOL/G L E/GEOG/GEOSCI 371 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVR ST/CIV ENGR 970 – COLLOQUIUM IN TRANSPORTATION MANAGEMENT AND POLICY**

1 credit.

Current issues, case studies, research, and literature dealing with transportation management and policy development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**ENVR ST 971 – ENVIRONMENTAL SENSING TECHNOLOGIES**

3 credits.

Many diverse technologies for monitoring the environment have become available in recent years, including traditional remote sensing data sources: aerial photography and satellite imagery, hyper-spectral data, imagery on demand, RADAR and LiDAR. Other new data sources are quite unconventional, with many emerging relatively recently: unmanned aerial vehicles (UAVs or drones), social media, smartphones as sources of crowd-sourced data, and more. Sophisticated data management, analytics, and presentation technology are required to effectively leverage both the spatial (including 3D) and temporal dimensions of these often untapped data sources. Intended to survey and explore these newly developing technologies, and provide direct experience to the student to understand and interact with the data and methods (geocomputing, coding, cloud-based platforms), and to learn to plan, manage, and utilize them effectively.

**Requisites:** ENVR ST/FW ECOL/G L E/GEOG/GEOSCI/LAND ARC/ ENVR ST/F&W ECOL/G L E/GEOG/GEOSCI 371 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ENVIR ST 972 – CONSERVATION PLANNING**

4 credits.

Prepare to plan, monitor and evaluate the effectiveness of conservation projects and programs. Learn systematic and adaptive processes of conservation planning.

**Requisites:** Declared in Environmental Conservation: Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST 974 – ENVIRONMENTAL CONSERVATION COHORT SEMINAR**

1 credit.

Introduction to professional development and important aspects of communication, collaboration, and professional practice as they relate to Environmental Conservation.

**Requisites:** Declared in Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ENVIR ST 975 – ENVIRONMENTAL CONSERVATION LEADERSHIP SEMINAR**

1 credit.

Introduction to important aspects of communication, negotiation, and cross-cultural professional practice as they relate to Environmental Conservation.

**Requisites:** Declared in Environmental Conservation: Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**ENVIR ST 976 – THE PRACTICE OF CONSERVATION BIOLOGY AND SUSTAINABLE DEVELOPMENT**

1 credit.

A weekly series of presentations by persons who have direct experience in the practice of conservation biology and sustainable development. Presenters may be students, faculty staff or agency persons.

**Requisites:** Declared in Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ENVIR ST 977 – SUSTAINABLE DEVELOPMENT - INTEGRAL PERSPECTIVE**

3 credits.

Review core concepts and history of sustainable development. Introduction to innovative frameworks to sustainable development, including integral framework, institutional analysis, and the often overlooked cultural, philosophical and psychological underpinnings of environmental decision-making. Analyze case studies and examples through the lens of the frameworks presented. Serves as a forum to present your research interests and examples regarding sustainable development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ENVIR ST 978 – ENVIRONMENTAL CONSERVATION TOOLS MODULES**

1 credit.

Modules provide training in specific tools and methods related to environmental conservation. Topics may include GIS, conservation finance, conservation governance institutions, biodiversity monitoring, and science communication environmental mediating.

**Requisites:** Declared in Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ENVIR ST 979 – ENVIRONMENTAL CONSERVATION PROFESSIONAL PRACTICE**

3 credits.

Provides an online environment for the development and practice of the skills needed to be an environmental conservation professional and leader. Analyze options and make good professional conservation judgments in complex and uncertain environmental, political, and economic settings. Provides the tools needed to assess and revise those judgments. Includes exercises on the politics of environmental decisions, internal and external communication strategies, and program development and assessment strategies.

**Requisites:** Declared in Environmental Conservation: Environmental Conservation MS

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **ENVIR ST/ATM OCN/BOTANY/F&W ECOL/GEOG/GEOSCI/ ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

### **ENVIR ST 990 – RESEARCH**

1-12 credits.

Independent research and writing towards thesis or dissertation requirement.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **ENVIR ST 993 – APPROACHES TO INTERDISCIPLINARY ENVIRONMENTAL RESEARCH**

2 credits.

Preparation of a proposal or manuscript to professional standards in interdisciplinary research. A review of other topics relevant to interdisciplinary work. Formal presentation of a research plan or other product to peers for review and evaluation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **ENVIR ST 999 – ADVANCED INDEPENDENT STUDY**

1-5 credits.

Independent work in environmental studies overseen by a qualified instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **FAMILY MEDICINE (FAM MED)**

### **FAM MED 699 – DIRECTED STUDY**

1-5 credits.

Directed study projects as arranged with faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **FAM MED 711 – THE HEALER'S ART**

1 credit.

Explores relationship-centered care in the medical profession. Topics include the importance of holistic self-care, methods of sharing, processing and responding to grief and the concepts of service and calling in medicine.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **FAM MED 712 – HEALTH CARE IN DIVERSE COMMUNITIES**

1 credit.

Introduction to issues in health care provided in diverse communities. Topics include cultural issues in medicine, health disparities, cross-cultural communication, culture and resiliency, historical background and ethics, civil rights in practice and minority health care professionals.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FAM MED 790 – RURAL PUBLIC HEALTH AND COMMUNITY PROJECTS FOR PHASE 3 WARM STUDENTS**

2 credits.

Opportunity for students to continue or enhance work on their longitudinal community projects through a self-directed learning experience.

**Requisites:** MED SC-M 810, 811, 812, and 813 and declared in Medicine:Wisconsin Academy for Rural Medicine or Medicine:Wisconsin Academy for Rural Medicine excellence in Rural Residencies.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

**FAM MED 909 – FAMILY MEDICINE INTERNSHIP PREPARATION ELECTIVE**

1 credit.

Review and reinforce baseline skills you will need for internship training in Family Medicine. Inpatient topics include hospital admission and discharge workflows, ICU basics, Chest pain, Acute respiratory symptoms, OB triage, Communication with patients and families. Outpatient topics include Common pediatric presentations, Common family medicine outpatient procedures, Telemedicine-based care. Additional topics include Common imaging and cardiopulmonary evaluations: Radiograph interpretation, Cardiac evaluations; Non-invasive respiratory support approaches; Shock management; Acute Coronary Syndrome management; Initial approach to and management of common, severe, infectious conditions; Procedural skills; Communication skills with health care providers; Written clinical documentation. Verbal communication with patients and families; Teaching skills.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**FAM MED 910 – RESEARCH AND INDEPENDENT STUDY ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of research in Family Medicine and primary care or to enable students who have already become involved in research in Family Medicine to complete or extend their work. Working with a faculty mentor, examine both the content and process of primary care research. Refine research questions, interview research participants, complete computer-based literature searches and complete critical literature reviews. Demonstrate understanding of research ethics, design, development, computer database management, statistical analysis and oral and written presentation.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**FAM MED 911 – EVIDENCE-BASED HERBAL MEDICINE SAFETY AND EFFICACY SELECTIVE IN FAMILY MEDICINE**

2 credits.

Gain a basic understanding of the pharmacology, mechanism of action, phytochemistry and botany (plant identification) of common plants used for healing in the United States. Analyze herbalpharmaceutical interactions and liver detoxification systems, extremely important skills in the practice of clinical medicine for any specialty. Prepare simple herbal treatments in the Learning Kitchen at the American Center and discuss practical applications in the clinical setting.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FAM MED 919 – INDIVIDUALIZED FAMILY MEDICINE ELECTIVE**

2-8 credits.

In-depth exposure to the principles of Family Medicine, emphasizing continuing and comprehensive care. Under direct faculty supervision, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, covers the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FAM MED 920 – CLINICAL ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FAM MED 924 – CORRECTIONAL SYSTEM HEALTHCARE ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine as it relates to the Correctional System Healthcare of the incarcerated, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis will be placed on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2020

### **FAM MED 926 – NATIVE AMERICAN CLINICAL ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine in the Native American community, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **FAM MED 927 – RURAL AND COMMUNITY CLINICAL ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine in the rural community, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **FAM MED 930 – URBAN AND COMMUNITY CLINICAL ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine in a urban community, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **FAM MED 931 – ADDICTIVE DISORDERS MANAGEMENT IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine approaches to Addictive Disorders, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **FAM MED 933 – SPORTS MEDICINE ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Sport Medicine in Family Medicine, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **FAM MED 935 – INPATIENT ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of Family Medicine in an inpatient setting, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 4 number of completions

**Last Taught:** Spring 2023

**FAM MED 937 – FAMILY MEDICINE UW HOSPITAL SUB-INTERNSHIP**

1-6 credits.

Introduction to the principles of Family Medicine, emphasizing continuing and comprehensive care. Share ongoing responsibility for the patient in both health maintenance and illness. Emphasis upon commitment to the person and understanding the problems in the total context of the patient's life.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FAM MED 938 – HOSPICE & PALLIATIVE CARE ELECTIVE IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to the principles of hospice and palliative care as it relates to Family Medicine, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis will be placed on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**FAM MED 939 – HEART IM (HUMANISTIC ELECTIVE IN ACTIVISM, REFLECTIVE TRANSFORMATION, AND INTEGRATIVE MEDICINE)**

4 credits.

Explore the nature of healing, activism, self-care and personal reflection. Experts in integrative medicine, nutrition, humanism, non-violent communication, health policy, and public health will lead didactic and experiential workshops throughout the course. Participate in a community service project as a way to synthesize and act upon core aspects of the curriculum in the surrounding community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**FAM MED 940 – COMMUNITY BASED CARE OF THE ELDERLY**

2-4 credits.

Training in transitions of care, the capabilities of nursing homes, the importance of interdisciplinary teams and the regulatory requirements and workings of the health care system. Interdisciplinary geriatric teaching service that includes experiences in a nursing home and the community. Didactic lectures are followed by bedside rounds, where geriatric topics are applied. Introduction to the principles of Family Medicine, emphasizing continuing and comprehensive care. Share ongoing responsibility for the patient in both health maintenance and illness. Emphasis upon commitment to the person and understanding the problems in the total context of the patient's life.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FAM MED 941 – INTEGRATIVE HEALTH ELECTIVE IN FAMILY MEDICINE**

2-4 credits.

In-depth exposure to the principles of Integrative Health as it relates to Family Medicine, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Emphasis on commitment to the patient and understanding the problems in the total context of the patient's life. Development of awareness of student physician and the patient's attitudes and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FAM MED 943 – INFECTIOUS DISEASE SURVEILLANCE**

2 credits.

Basics of infectious disease, including the microbiologic, virology, and parasitology of human disease, the immune response to infection, pathologic changes related to infectious disease, and the pharmacology of anti-infectious agents. Understanding antimicrobial stewardship, importance of prevention, including vaccination, and an understanding of infectious disease surveillance on local, regional, national, and global systems. Appreciation of emerging infectious threats, threats from climate change on microbiota, and the epidemiology of an emerging infection.

**Requisites:** MED SC-M 810, 811, 812, AND 813 and Grad or Professional student

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## **FAM MED 944 – OFFICE-BASED PROCEDURES IN FAMILY MEDICINE**

2-8 credits.

In-depth exposure to principles of office-based procedures in Family Medicine, emphasizing continuing and comprehensive care. Under direct supervision by faculty, share ongoing responsibility for the patient in both health maintenance and illness. Develop self-awareness as student physician, recognition of patient attitudes, and learn to use interactions as a therapeutic tool. In addition to the pathology of disease, learn the appropriate use of patient education, preventative medicine and the role of family and community resources in providing quality primary care. Share ongoing responsibility for the patient in evaluation, diagnosis, procedure and follow-up. Small office procedures may include; vein treatments, skin lesion removal, prolotherapy, perineural injection therapy, no-scalpel vasectomy, thread carpal tunnel release, liposuction, hemorrhoid treatments, and frenotomy for tongue tie.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

# **FARM AND INDUSTRY SHORT COURSE (FISC)**

## **FISC 20 – INTRODUCTION TO PLANT SCIENCE**

2 credits.

Students will learn about growing crops and plants, the basics of plant growth, how plants have diversified based on environmental locations, classifications of plants, and general plant nutrition.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

## **FISC 21 – AGRICULTURAL SALES**

2 credits.

Students will learn the basic steps to the sales process in order to prepare for a career in agricultural sales and related sales applications found in daily life; develop sales-related skills, such as negotiation skills, body language, and time management skills; and reflect on and develop personal strengths and abilities that will enhance agricultural sales presentations and customer relationships.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## **FISC 23 – SAFE AND EFFECTIVE USES OF PESTICIDES IN AGRONOMIC CROPS**

1 credit.

Students will learn about the multiple aspects of pesticides (herbicides, insecticides, and diseases) use in WI agronomic crops through learning about the patterns, application methods, resistance, regulation, and safe application. Emphasis will be placed on how to utilize existing resources to use pesticides safely, legally, and effectively while minimizing environmental impacts.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

## **FISC 49 – AGRICULTURAL WEATHER AND CLIMATE**

1 credit.

Introduces the concepts of weather and climate, and discusses the importance of weather and climate for agricultural production. Covers the methods of collecting, accessing, and using weather information for agricultural management and planning. In addition, covers the underlying physical principles associated with anthropogenic climate change.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

## **FISC 50 – THE BUSINESS OF AGRICULTURE**

1 credit.

Examines the five areas of risk management of an agricultural business: production risk, human risk, financial risk, market risk, and institutional risk. Discusses the internal and external contexts affecting the management of an agricultural business. Investigates the changing structures of agriculture, creating a unique landscape for today's agricultural businesses. Students are encouraged throughout the course to reflect on and discuss examples from their own experiences, and think critically about how these factors may impact their strategy for managing a business.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## **FISC 51 – BUSINESS PRINCIPLES OF AGRICULTURAL MANAGEMENT**

1 credit.

An introduction to the working of a market economy and decision-making concepts; the role of prices and preferences in making production and consumption decisions; U.S. agricultural system and various economic policies that may be employed by government; Taxation, regulation, trade, and employment policies.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FISC 52 – AGRICULTURAL SAFETY AND HEALTH**

1 credit.

Causes and prevention of common farm injuries and illnesses; control of hazards; types of fatal and non-fatal injuries; tractor and machinery-related injuries and operating practices; hazards to children; animal-related injuries; confined spaces; respiratory hazards; chemical exposure; personal protective equipment; OSHA, DOL, and EPA worker-related regulations; causes and prevention of injuries including inspections and hazard control, and safety management strategies and activities.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**FISC 53 – AGRICULTURE HUMAN RESOURCES MANAGEMENT**

1 credit.

Understanding roles of manager, leader, and communicator; developing a human resource management philosophy; finding and retaining employees; legal considerations.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FISC 54 – AGRIBUSINESS COMMUNICATIONS**

2 credits.

Introduction to interpersonal communication skills for use in a variety of agribusiness settings. Topics include verbal, non-verbal, and written communication methods; negotiation skills; promotion techniques; and the application of these in agribusiness.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**FISC 55 – FARM AND INDUSTRY SHORT COURSE FIRST-YEAR SEMINAR**

1 credit.

Provides first-year Farm Industry Short Course students with an academic orientation to the FISC program. Topics include current agricultural- and consumer-related issues (e.g., food systems, agriculture advocacy, climate change, etc.), academic and career development, and an introduction to the academic resources and opportunities of the college and university.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**FISC 56 – AGRICULTURE, FOOD SYSTEMS, AND RURAL DEVELOPMENT**

1 credit.

Students will study how national economic and social policies affect farmers and rural residents. Topics include rural economic trends and issues; rural development policies; state and local taxes; local land use planning; farm financial stress and government intervention; farmer-natural resource use conflicts; and the impacts of international trade agreements and export policies.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FISC 57 – INTRODUCTION TO SOILS**

2 credits.

Soil formation; important physical and chemical properties; soil moisture; introduction to soil fertility; soil mapping and classification.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FISC 58 – FORAGE CROPS**

2 credits.

Identification and characteristics of forage legumes and grasses; management and culture of legumes, grasses and grass-legume mixtures; weed, insect, and forage disease control; hay and haymaking; legume, grass, and corn silage; forage varieties and their uses; forage quality and its importance in feeding livestock; pasture types and improvement; forage production trends.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FISC 59 – FOOD SAFETY**

1 credit.

Covers basic principals of food safety including safeguarding our food supply and preventing food-borne illnesses from farm to market.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**FISC 61 – DAIRY HERD HEALTH**

1 credit.

In this course, students will learn the basic veterinary medical terminology and goals of a veterinarian as it pertains to the dairy cow and dairy young stock. Students will understand how to prevent herd health problems and will begin to recognize signs when they arise. Students will also be able to discuss health problems with the herd veterinarian. Specific topics will include: cattle disease problems; how the animal body works; digestive disorders, noninfectious diseases, principles of infection and sanitation; state regulations against disease.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020



**FISC 63 – DAIRY HERD MANAGEMENT**

2 credits.

In this comprehensive course, students will learn how to care for their herd to increase production and profits. Use of business, feeding, and herd management tools in dairy farm operation will be covered in depth. Case studies of individual farms used for analysis and planning. Specific topics covered will include: cattle movement and behavior, calf care, heifer care, nutrition, reproduction, fresh cows and diseases, parlor management, milk harvest, mammary anatomy, mastitis and milk quality control, cattle comfort and housing options, herd culling decisions, and interacting with the consumer.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FISC 71 – PASTURE MANAGEMENT**

1 credit.

This course covers pasture establishment, pasture improvement and pasture plant growth. Students will also learn about the in-depth topics of pasture layouts, fencing and water systems, animal behavior on pastures, general pasture utilization and animal nutrient needs on pasture, including supplemental feeding.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**FISC 72 – PASTURE BASED DAIRY/LIVESTOCK - BUSINESS START-UP AND MARKETING**

1 credit.

Students will learn production and management strategies emphasizing pasture-based dairy or livestock farm start-up. Students will begin a business plan in this introductory course as the first of the two-course series. There will be one full-day required field trip. This course is held in conjunction with, and serves as the core of, the Wisconsin School for Beginning Dairy and Livestock Farmers (WSBDF).

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**FISC 73 – PASTURE BASED DAIRY/LIVESTOCK - MANAGING THE BUSINESS**

1 credit.

Course covers grass-fed production and marketing, risk management (specifically of pasture-based farms), pasture soil nutrient management, grazing and natural resource management, and ecological restoration through livestock. Students will present their business plans to a panel of lenders. Students will be required to attend four evening Business Plan Writing Workshops. This is the final course in the two-course series of the Wisconsin School for Beginning Dairy/Livestock Farmers (WSBDF) program.

**Requisites:** FISC 072

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**FISC 75 – SPECIAL TOPICS IN FISC**

1-3 credits.

Specialized subject matter of current interest to FISC students.

**Requisites:** Declared in Foundations of Farm Management certificate program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**FISC 101 – MEAT ANIMAL PRODUCTION I**

2 credits.

In this course, students will be focusing on the ruminant livestock production systems. Students will evaluate and design the implementation of foundational principles in beef cattle, sheep and goat production. Through the connecting of production system to market costs and revenues, students will gain an in-depth understanding of meat animal livestock production. Students will have hands-on experiences in beef cattle, sheep and goat management.

**Requisites:** Declared in the Farm Industry Short Course program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**FISC 102 – MEAT ANIMAL PRODUCTION II**

2 credits.

In this course, students will learn about the monogastric and ruminant meat animal, specifically swine, and poultry production systems. Focusing on swine and poultry, students will evaluate and design the implementation of foundational principles in swine and poultry production as well as build on beef, sheep and goat foundations from Meat Animal Production I. Students will learn about production costs and revenues and experience hands-on opportunities with several meat animal species.

**Requisites:** FISC 101

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**FISC 104 – GRAIN CROPS PRODUCTION & MANAGEMENT**

2 credits.

This course covers corn, soybeans, and small grains (wheat). Current production recommendations related to hybrid and variety selection, seedbed preparation, pest control, fertility management, harvest, storage, marketing, and crop ecology will be discussed. Students will be encouraged to explore resources and develop confidence to find solutions on the farm.

**Requisites:** Declared in Foundations of Farm Management or Crops Soils Management certificate program

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**FISC 105 – DAIRY CATTLE SELECTION AND EVALUATION**

2 credits.

In this course, students will learn the basics of genetic selection programs and the effectiveness of appropriate selection strategies specific to the dairy farm. Genomic testing research and advanced reproductive techniques will be discussed and students will learn about the correct application of these techniques on their farm. Basic anatomy of a dairy cow and linear scoring systems. After establishing dairy cow conformation and functionality and appraisal systems, students will evaluate cattle using type scorecards to improve the appearance, performance and longevity of dairy cattle. Following the understanding of the factors that impact the value of cattle, students will also learn how to apply corrective mating programs to improve perceived defects or nonexistent features in their herd(s).

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 110 – LIVESTOCK HOUSING**

2 credits.

This covers planning of dairy, beef and swine, livestock housing for proper environmental control, manure and feed handling, and labor and capital efficiency. Topics include building materials, heat loss, silo sizing, cost estimating, computer aided design, and ventilation and manure storage. Students will develop a plan for their own farmstead. This course is useful for those who plan to construct livestock buildings within the next 5-15 years, including those who want to work in the farm building trade.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Fall 2018**FISC 114 – RUMINANT NUTRITION**

2 credits.

Students will learn practical nutrition for lactating dairy cows, dairy heifers, and dairy beef. This course covers digestion and nutrient metabolism, milk synthesis and ration formulation guidelines and stresses importance of quality forage in the feeding program. Students will learn the basic anatomy and physiology of the digestive system of ruminant animals and how feeding and management are geared toward optimizing rumen function. This course will introduce the basic concepts of nutrition and how feeds provide nutrients and basic skills necessary for feeding dairy cattle. Students will learn how to assess animal performance and adequacy of the feeding program through evaluating intake, body condition, and transition cow health and learn how to feed and manage growing ruminants.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 115 – AGRIBUSINESS FEASIBILITY PLANNING**

1 credit.

Accounting, budgeting and communication skills are necessary to develop and evaluate farm business plans. Students are introduced to computerized farm accounting and will develop skills with modern electronic spreadsheets and FINPACK while developing a case farm feasibility assignment.

**Requisites:** FISC 051**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 119 – INTRODUCTION TO TURFGRASS MANAGEMENT**

2 credits.

Use and management of turfgrass landscapes in urban and suburban environments, including home lawns, golf courses, and sports fields. Focus is on creating sustainable and attractive turfgrass landscapes through proper species selection, use of slow-release or organic fertilizer practices, and minimizing the use of pesticides and supplemental irrigation.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Fall 2021**FISC 120 – MEAT ANIMAL EVALUATION & MARKETING**

2 credits.

This course demonstrates how meat animals within a species differ in value, grade and yield. This course will also cover price determination and marketing systems for each species. The students will receive hands-on experience in evaluating, slaughtering, and cutting beef and pork. Lamb processing and manufacturing of processed meat items will be demonstrated.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Fall 2019**FISC 121 – AGRICULTURAL COMMODITIES MARKETING**

2 credits.

This course focuses on the farm and its marketing environment and provides an overview of the economics of grain and milk markets. The course concentrates on developing skills for effective grain and dairy marketing analysis and strategies. It examines forward contracting, hedging on futures markets, delayed pricing and options trading. It will also examine farm policies and the impact on farms. Students will gain an understanding and appreciation of the commodity and futures markets, major trends and causes of trends in dairy and grain industries, market factors that influence farm commodities, risk tools and cooperatives.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Fall 2021**FISC 122 – TURFGRASS NUTRIENT MANAGEMENT**

2 credits.

Nutrient requirements of turfgrasses; nature of turfgrass response to fertilization; soil and tissue testing methodology and interpretation; writing effective nutrient management plans.

**Requisites:** FISC 119 and 020**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 123 – TURFGRASS INTEGRATED PEST MANAGEMENT**

2 credits.

Using tools to effectively manage the most common weed, insect, and disease pests seen on turfgrass in the Midwest; including proper identification of each pest, the biology of each pest, and cultural and chemical control strategies for each pest.

**Requisites:** FISC 119**Repeatable for Credit:** No**Last Taught:** Fall 2021

**FISC 124 – TURFGRASS IRRIGATION AND DRAINAGE**

1 credit.

Water and irrigation requirements of turfgrasses; irrigation budgeting and scheduling; water conservation strategies; soil water flow and drainage; evaluation of irrigation water quality.

**Requisites:** FISC 119**Repeatable for Credit:** No**Last Taught:** Fall 2021**FISC 133 – SOIL AND CROP NUTRIENT MANAGEMENT**

2 credits.

Students will understand how to sample and analyze soil to determine nutrient composition and deficiencies, apply knowledge of crop needs to develop nutrient management plans for various crops across a spectrum of Wisconsin soil types, and understand how other properties of soil, including drainage and erosion, can impact nutrient levels and crop productivity.

**Requisites:** FISC 057**Repeatable for Credit:** No**Last Taught:** Spring 2020**FISC 134 – REPRODUCTION OF FARM ANIMALS**

2 credits.

Students will learn the basic comparative physiology of reproduction of farm animals and apply those physiological principles to understand successful heat detection, artificial insemination, estrous synchronization, embryo transfer, pregnancy diagnosis, and improvement of reproductive efficiency through good reproductive management.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 136 – AGRICULTURAL BUSINESS LAW**

1 credit.

This course will provide a basic overview of some of the areas of the law that may impact the farm or agribusiness, and assist students in identifying practices and activities that may impact their legal liability. Students will become acquainted with basic legal terms and concepts, understand basic techniques of legal analysis, be able to identify legal issues and be better equipped to explain issues to attorneys.

**Requisites:** Declared in the Farm Industry Short Course program**Repeatable for Credit:** No**Last Taught:** Spring 2019**FISC 140 – FARM MACHINERY**

2 credits.

Principles of operation, construction, maintenance, and management of machines for the production of agricultural crops. Laboratory sessions include working with machine components and actual field machines. Previous experience with farm machinery is not required.

**Requisites:** Declared in Foundations of Farm Management or Farm and Equipment Operations certificate program**Repeatable for Credit:** No**Last Taught:** Fall 2021**FISC 142 – IDENTIFICATION AND MANAGEMENT OF AGRONOMIC PESTS**

3 credits.

Introduces students to principles in Integrated Pest Management with an emphasis on pest biology and management in agronomic settings.

**Requisites:** Declared in Crops and Soils Management or Diversified Ag Operations certificate program**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 143 – FARM POWER**

2 credits.

Principles of operation, construction, maintenance, and management of agricultural tractors and engine power systems. Covers two- and four-stroke diesel and spark-ignition engines, lubrication, cooling, fuel systems, power measurement, electrical systems, and transmissions. Labs focus on understanding the tractor and engine but do not include tractor or engine overhauls. Course assumes no previous experience with tractors or engines.

**Requisites:** Declared in Foundations of Farm Management or Farm and Equipment Operations certificate program**Repeatable for Credit:** No**Last Taught:** Spring 2022**FISC 145 – PRECISION AGRICULTURAL TECHNOLOGIES**

2 credits.

Precision agriculture can aid in reducing inputs for crop production. Course provides an overview of precision agriculture technologies and will cover Global Positioning Systems, Geographic Information Systems, variable rate technology, section/flow control, soil and yield mapping, and guidance systems. Economics of the different technologies will be discussed. Previous experience with precision agriculture systems is not required.

**Requisites:** Declared in Foundations of Farm Management or Farm and Equipment Operations certificate program**Repeatable for Credit:** No**Last Taught:** Fall 2019

## FINANCE, INVESTMENT AND BANKING (FINANCE)

**FINANCE 200 – CAREERS IN FINANCE**

1 credit.

An introduction to exploring finance career pathways and successfully navigating the finance internship/full-time recruitment process. Topics include the Finance industry, finance career pathways, career preparation strategies, and success strategies for working in the finance industry.

**Requisites:** Freshman or sophomore standing only and (GEN BUS 110 or 120 or concurrent enrollment)**Repeatable for Credit:** No**Last Taught:** Spring 2022

**FINANCE 205 – FINANCIAL MODELING IN EXCEL**

1 credit.

A technical skills course in which you will learn how to construct an error-free, well-structured and user-friendly integrated three-statement company model. Constructing a financial model in Excel is a key skill for success as a financial analyst.

**Requisites:** ACCT I S 100 or 300**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE/ECON 300 – INTRODUCTION TO FINANCE**

3 credits.

Concepts and techniques in corporate finance and investments. Topics include the financial environment, securities markets, financial markets, financial statements and analysis, working capital management, capital budgeting, cost of capital, dividend policy, asset valuation, investments, decision making under uncertainty, mergers, options, and futures.

**Requisites:** (ECON 101, 111 or A A E 215) and (ACCT I S 100 or 300 or concurrent enroll in ACCT I S 100) and (GEN BUS 306, ECON 310, MATH/STAT/MATH 309, 431, STAT 224, 301, 302, 311, 324, 371 or PSYCH 210 or concurrent) or declared in undergrad Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 305 – FINANCIAL MARKETS, INSTITUTIONS AND ECONOMIC ACTIVITY**

3 credits.

An analysis of the U.S. financial system, its responsiveness to and impact on economic activity and policy, its procedures for assessing and pricing risks on various financial instruments, and its role in the allocation of funds to different sectors in the economy.

**Requisites:** (FINANCE/ECON/FINANCE 300 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 310 – DATA ANALYTICS FOR FINANCE**

3 credits.

With a hands-on approach, covers advanced analytics methods for forecasting, predicting, reporting, and analyzing. Relies on Python as its primary coding language. Begins with a review of coding fundamentals and progressively delves into increasingly realistic and complex finance applications.

**Requisites:** FINANCE/ECON/FINANCE 300**Repeatable for Credit:** No**Last Taught:** Spring 2022**FINANCE/ECON 320 – INVESTMENT THEORY**

3 credits.

Structure and functioning of securities markets; principles of portfolio construction; models of the tradeoff between risk and expected return.

**Requisites:** ECON/FINANCE/ECON 300, (MATH 213, 222, or 276) and (GEN BUS 307, 656, ACT SCI 654, 655, ECON 400, 410, MATH/STAT/MATH 310, STAT 312, or 333 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 325 – CORPORATION FINANCE**

3 credits.

Development of the theory, method and analytical techniques of financial management. Techniques of capital budgeting; valuation of projects and firms; theory of capital structure; dividend policy; cost of capital; mergers and acquisitions.

**Requisites:** ECON/FINANCE/ECON 300 and ACCT I S 301 and (MATH 213, 222, or 276) and (GEN BUS 307, ACT SCI 654, ECON 400, 410, MATH/STAT/MATH 310, STAT 312, or 333 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 330 – DERIVATIVE SECURITIES**

3 credits.

Pricing and uses of the most common derivatives including options, forward contracts, futures contracts, and swaps.

**Requisites:** ECON/FINANCE/ECON 300, (MATH 213, 222, or 276) and (GEN BUS 307, 656, ACT SCI 654, 655, ECON 400, 410, MATH/STAT/MATH 310, STAT 312, or 333 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 340 – FIXED INCOME SECURITIES**

3 credits.

Analysis of fixed income, bond markets. The objective of the class is to introduce tools for evaluating bonds and making decisions about trading and hedging portfolios of fixed income securities. The main focus is on government bonds and derivative securities associated with them. Consider basic ways to price these bonds using techniques that are well established on Wall St. Introduces basic trading strategies based on exploiting mis-priced securities. Such strategies are profitable when risks are minimized, and so we will discuss several ways to measure and minimize risk. Also discusses the pricing of derivative securities such as bond options and swaps. Other topics include repo financing, mortgage markets, and basic issues involving default risk of corporate bonds.

**Requisites:** FINANCE 330 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2022

**FINANCE 365 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FINANCE 399 – READING AND RESEARCH-FINANCE**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FINANCE 410 – BANK MANAGEMENT**

3 credits.

Management of depository financial intermediaries with primary emphasis on commercial banks. Topics include bank regulation, liquidity and reserve position management, loan pricing and analysis, investment portfolio problems and overall asset liability management.

**Requisites:** ECON/FINANCE/ECON 300 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE 420 – INVESTMENT BANKING AND CAPITAL MARKETS**

3 credits.

Provides a broad overview of investment banking. Topics covered include valuation, cash flow, initial public offerings, leveraged buyouts, merger and acquisitions and related corporate governance issues.

**Requisites:** (FINANCE/ECON/FINANCE 300 or concurrent enrollment) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE/INTL BUS 445 – MULTINATIONAL BUSINESS FINANCE**

3 credits.

Application of financial theory to the operations of multinational firms; survey of the international financial environment; determinants of international portfolio and direct investment capital flows; management of foreign exchange position and hedging strategies; evaluation of foreign investment projects (multinational capital budgeting); international financial structure decisions; multinational credit institutions and capital markets; taxation of international business.

**Requisites:** ECON/FINANCE/ECON 300 and (MATH 213, 222, or 276), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE 457 – ENTREPRENEURIAL FINANCE**

3 credits.

Discusses the tools helpful for financing new ventures, with emphasis on their applications. The course also helps students understand the institutional setting that has an impact on the financing conditions of new ventures.

**Requisites:** ECON/FINANCE/ECON 300, ACCT I S 301, and (MATH 213, 222, or 276)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE/ECON 503 – MARKETS WITH FRICTIONS**

3 credits.

Search theory provides framework for understanding markets; is used to study questions in monetary, public, financial economics. This course will develop theoretical tools used to introduce frictions in formal models; will address the role of frictions in several applied scenarios.

**Requisites:** (FINANCE 305, ECON 301, 302, 311, or 312) and (MATH 213, 222, or 276); or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**FINANCE 535 – APPLIED EQUITY MARKETS RESEARCH 1**

3 credits.

A capstone experience focused on investments, research, sales and trading which is designed to provide the opportunity to learn and perform many of the practical skills necessary to research, analyze and pitch equity securities as long investments and/or short sales. Application required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE 536 – APPLIED EQUITY MARKETS RESEARCH 2**

3 credits.

A second capstone experience involving self-directed research and analysis in the areas of investments, research, sales and trading designed to provide the opportunity to apply concepts learned in FINANCE 535.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**FINANCE 602 – WEALTH MANAGEMENT & FINANCIAL PLANNING**

3 credits.

As a capstone, it bridges prior academic coursework with professional practice and standards. Employ skills and tools needed to acquire the relevant information and develop a comprehensive financial plan for a client. Provides a complete review of the financial planning CFP Board topics, including ethics and principles of communication and counseling.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**FINANCE 610 – BANK SIMULATION AND STRATEGY**

3 credits.

Covers advanced asset-liability, hedging, tax minimization, merger/acquisitions and economic value added strategies for depository financial institutions. Students practice these strategies by managing their own bank in a computer simulation model, merging with or acquiring other student's banks using MA software, and by playing a foreign exchange trading simulation.

**Requisites:** FINANCE 410**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**FINANCE 635 – BUSINESS VALUATION**

3 credits.

Theory and practice of business valuation: using financial statements, modeling cash flows, present value, using multiples.

**Requisites:** ECON/FINANCE/ECON 300, FINANCE 700, or declared in the Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 645 – INTRODUCTION TO APPLIED SECURITY ANALYSIS**

3 credits.

Focuses on industry analysis and security selection, with particular emphasis on identification of value drivers and on communicating the idea to a portfolio manager.

**Requisites:** Declared in Finance, Investment and Banking: Applied Security Analysis, MBA or Finance, Investment and Banking: M.S.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FINANCE 646 – INTRODUCTION TO APPLIED PORTFOLIO MANAGEMENT**

3 credits.

Focuses on portfolio management, including development and implementation of the decision making process.

**Requisites:** FINANCE 645**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 650 – MERGERS AND ACQUISITIONS**

2-3 credits.

Study of the market for corporate control including mergers and tender offers. Motives for business combinations; impacts on security holders, managers, labor, economic efficiency; federal and state laws; offensive and defensive strategies. Term paper involving comprehensive analysis of issues.

**Requisites:** (ECON/FINANCE/ECON 300 or 700) and (FINANCE 325, 635, or 725)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 700 – INTRODUCTION TO FINANCIAL MANAGEMENT**

2-3 credits.

Introduction to financial management of firms and investment decision making; both theory and practice are emphasized. Topics covered include the financial environment and securities markets, financial statements and analysis, working capital management and capital budgeting, cost of capital, dividend policy, asset valuation, investments, decision making under uncertainty and selected topics such as mergers, options, futures.

**Requisites:** Declared in a Master of Business Administration degree program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FINANCE 720 – INVESTMENT THEORY AND PRACTICE**

3 credits.

Development of the theory, instruments, techniques and practice of modern investment management. Topics include asset pricing and valuation under certainty and uncertainty, portfolio management, determination of interest rates, immunization strategies and derivative securities.

**Requisites:** (FINANCE 700 and GEN BUS 704), declared in graduate Business Exchange program, or Financial Economics MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FINANCE 725 – CORPORATION FINANCE THEORY AND PRACTICE**

2-3 credits.

Theory and practice of financial management of firms. Techniques of capital budgeting under certainty and uncertainty; valuation of projects and firms; theory of capital structure; dividend policy; cost of capital; mergers and acquisitions.

**Requisites:** FINANCE 700**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**FINANCE 730 – DERIVATIVE SECURITIES - THEORY AND PRACTICE**

3 credits.

Covers the pricing and uses of the most common derivative contracts including options, forward contracts, futures contracts, and exchange-traded funds (ETFs). Also emphasizes a practical understanding of trading and management of portfolios of these contracts, and makes use of an online trading platform. Mathematical and statistical analyses are used throughout.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FINANCE 740 – ANALYSIS OF FIXED INCOME SECURITIES**

3 credits.

Detailed coverage of fixed income securities and their derivatives; asset backed/mortgage backed securities; pricing and portfolio strategies; term structures models and other analytical tools.

**Requisites:** (FINANCE 700 and GEN BUS 704) or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE/INTL BUS 745 – MULTINATIONAL BUSINESS FINANCE**

2-3 credits.

Theory of business finance as applied to the operations of multinational firms; financial analysis and control of foreign investment decisions; working capital management; multinational credit institutions and capital markets; special accounting problems and trends in international monetary affairs.

**Requisites:** FINANCE 700**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 755 – CORPORATE RESTRUCTURING & REORGANIZATION**

3 credits.

Financial policy decisions such as working capital management, dividend policy, capital structure and cost. Case studies emphasized.

**Requisites:** FINANCE 700 and (FINANCE 725, 726, or 635)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**FINANCE 757 – ENTREPRENEURIAL FINANCE**

2-3 credits.

About a half of all new businesses fail in the first five years. Learn about the tools, state-of-the-art valuation methods, and practical knowledge that are needed to make appropriate financing decisions in such highly uncertain environments.

**Requisites:** (FINANCE 700 and GEN BUS 704) or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FINANCE 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FINANCE 799 – READING AND RESEARCH-FINANCE**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and the intersession periods.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FINANCE 830 – ADVANCED DERIVATIVE SECURITIES**

3 credits.

Introduces continuous-time financial models essential for the advanced analysis of derivative securities. Discuss the fundamental mathematical concepts and tools from continuous-time stochastic processes including Brownian motion, Poisson processes, stochastic calculus, and change of measure. This provides a framework for analyzing derivative securities including their pricing, hedging, and risk management. In particular, covers the Black-Scholes and stochastic volatility models for equity options; basic term-structure modeling for interest rate derivatives; and reduced-form credit-risk models. Emphasis is put on applications and economic interpretation rather than mathematical rigor.

**Requisites:** Declared in Financial Economics MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**FINANCE 835 – APPLIED SECURITY ANALYSIS AND INVESTMENT MANAGEMENT I**

5 credits.

The management of an actual portfolio of investments. Engage in security analysis, develop a portfolio policy, and participate in field research such as trips to interview the management of potential portfolio acquisitions.

**Requisites:** Declared in Finance, Investment and Banking: Applied Security Analysis graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**FINANCE 836 – APPLIED SECURITY ANALYSIS AND INVESTMENT MANAGEMENT II**

4 credits.

Continuation of FINANCE 835.

**Requisites:** FINANCE 835

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FINANCE 850 – APPLIED CORPORATE FINANCE I**

4 credits.

Advanced corporate finance course that provides graduate students practical experience by working on consulting projects. Students work on applied projects in the areas of capital budgeting, capital structure and cash distribution policies. Emphasis on application of theoretical corporate finance concepts.

**Requisites:** Declared in Finance, Investment and Banking: Corporate Finance and Investment Banking graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**FINANCE 851 – APPLIED CORPORATE FINANCE II**

5 credits.

Students apply advanced corporate finance training in the areas of real options, mergers and acquisitions, and corporate restructuring and reorganization to problems provided by corporate sponsors. Development of analytical, written and oral presentation skills through presentations to the corporate sponsors.

**Requisites:** FINANCE 850

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**FINANCE 920 – THEORY OF FINANCE**

3 credits.

Intensive review of modern theories of corporate finance and investments.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**FINANCE 970 – SEMINAR- INVESTMENTS (PH.D.)**

3 credits.

Intensive study and critical examination of recent empirical and theoretical literature investments.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FINANCE 971 – SEMINAR-CORPORATE FINANCE (PH.D.)**

1-3 credits.

Intensive study and critical examination of recent empirical and theoretical literature in corporate finance.

**Requisites:** Declared in Business or Economics PhD programs

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FINANCE 972 – TOPICS SEMINAR-FINANCE PHD**

3 credits.

Special topics of current or emerging interest in financial economics.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**FINANCE 973 – SEMINAR-WORKSHOP IN FINANCE**

2 credits.

Seminar primarily devoted to the generation of original research in the field of finance for the Ph.D. dissertation and subsequent publication in the academic literature.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FINANCE 974 – ADVANCED TOPICS SEMINAR-FINANCE PHD**

3 credits.

Discuss topics of current and emerging interests in financial economics; analyze open questions and new methodologies that are being applied to address these questions. Build on knowledge in financial economics and further previous exposure to both continuous-time and discrete-time dynamic models. Topics will evolve over time as new papers will be added and addressed.

**Requisites:** Declared in Business or Economics PhD programs

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

### **FINANCE 990 – FINANCE INDEPENDENT RESEARCH PHD THESIS** 1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **FINANCE 999 – READING AND RESEARCH-FINANCE PHD** 1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## **FOLKLORE PROGRAM (FOLKLORE)**

### **FOLKLORE 100 – INTRODUCTION TO FOLKLORE** 3 credits.

Surveys folklore in the United States and around the world, with a comparative emphasis on ways in which individuals and groups use beliefs, songs, stories, sayings, dances, festivals, and artifacts to address issues of identity, authenticity, and authority, in complex societies.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102 – INTRODUCTION TO COMPARATIVE US ETHNIC AND AMERICAN INDIAN STUDIES** 3 credits.

Introduction to comparative ethnic studies, examining race, ethnicity, and indigeneity within the United States. Includes perspectives from African American, American Indian, Asian American, and Chican@ and Latin@ studies.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FOLKLORE/MUSIC 103 – INTRODUCTION TO MUSIC CULTURES OF THE WORLD** 3 credits.

An introductory ethnomusicology course providing a variety of ways to approach musics typically not covered in music history courses. Active engagement with these musics within their larger world contexts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FOLKLORE/RELIG ST 104 – SACRED PLACES AND JOURNEYS** 3 credits.

An introduction to the study of religion through the lens of sacred places and journeys, including pilgrimage.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **FOLKLORE/GNS 200 – FOLKLORE OF CENTRAL, EASTERN AND NORTHERN EUROPE** 3 credits.

Folklore of Central, Eastern and Northern Europe and among emigrants from these regions in North America. A survey of genres of folklore, history of research, and modes of interpretation, past and present.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **FOLKLORE/AFRICAN 210 – THE AFRICAN STORYTELLER** 3 credits.

The oral tradition and the written word; the composition of stories, relationship between performer and audience, and transmission of tradition in various African societies.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FOLKLORE/ANTHRO/INTL ST/LINGUIS 211 – GLOBAL LANGUAGE ISSUES**

3 credits.

Focuses on language and its culture, example topics include: extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOLKLORE 215 – ELEMENTARY TOPICS IN FOLKLORE**

1-3 credits.

Exploration of various topics in the study of folklore, folklife, myth, foodways, or music.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FOLKLORE 220 – THE FOLK TALE**

3 credits.

Types of heroes, social functions, and tellers; tales from four cultures.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**FOLKLORE 230 – INTRODUCTION TO AMERICAN FOLKLORE**

3 credits.

Folklore of ethnic, regional, religious, and occupational cultures, emphasizing how diverse peoples (African Americans, American Indians, Appalachians, Chicanos, Germans, Irish, Jews, Mormons, miners, service workers, etc.) use traditional festivals, artifacts, songs and stories to express their experiences within American life.

**Requisites:** None**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**FOLKLORE/AFRICAN 270 – THE HERO AND TRICKSTER IN AFRICAN ORAL TRADITIONS**

3 credits.

Two major characters in African oral tradition as treated in narrative, epic and heroic poetry.

**Requisites:** 3 credits in AFRICAN**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**FOLKLORE 315 – INTERMEDIATE TOPICS IN FOLKLORE**

1-3 credits.

Exploration of various topics in the study of folklore, folklife, myth, foodways, or music.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FOLKLORE 317 – THE IRISH TRADITION**

3 credits.

Survey of Irish folklore and folklife, including narrative, music, dance, customs, material culture, and foodways, in both Ireland and beyond.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**FOLKLORE/AFROAMER/ASIAN AM/DANCE 319 – AFRO ASIAN IMPROV: FROM HIP HOP TO MARTIAL ARTS FUSION**

3 credits.

An Afro Asian perspective provides a lens through which intersections between Asian American and African American dance and martial arts are studied and practiced. Asian American and African American movement genres provide tools to explore dance fusion, choreography, and improvisation, to create dances informed by African American and Asian American legacies of struggle, innovation and transformation, while cognizant of historical forces of oppression and racism. Building connections through respectful communication with others are learned through dance practice, discussion and writing about concepts learned through readings, videos, and guest artist visits. Engagement with dance as a cultural vehicle for creative problem-solving and risk-taking occurs through guided class or smaller group activities.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**FOLKLORE 320 – FOLKLORE OF WISCONSIN**

3 credits.

Introduction to folk cultural groups and folklore forms of Wisconsin.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**FOLKLORE/DANCE/THEATRE 321 – JAVANESE PERFORMANCE**

2 credits.

Technique and practice of classical Javanese dance in its musical, historical and cultural contexts.

**Requisites:** Junior standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**FOLKLORE/LITTRANS 327 – THE VAMPIRE IN LITERATURE AND FILM**

3 credits.

Explores the image of the vampire in literature and visual arts as a metaphor for Eastern Europe and the Slavic world. Begins with folklore and moves through literary texts to film and television.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOLKLORE/MEDIEVAL/RELIG ST/SCAND ST 342 – NORDIC MYTHOLOGY**

3 credits.

Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOLKLORE/LITTRANS/MEDIEVAL/SCAND ST 345 – THE NORDIC STORYTELLER**

3 credits.

Exploring the oral nature and performance traditions of folklore, ethnography, tales and ballads, literature and culture from Nordic areas and Scandinavia.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOLKLORE/LITTRANS/MEDIEVAL 346 – IN TRANSLATION: THE ICELANDIC SAGAS**

3-4 credits.

Gain an understanding of saga literature as a genre and of the cultural history of Iceland in the Viking Era and the Middle Ages, based on the interplay between pagan codes of honor and Christian ethics.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**FOLKLORE/LITTRANS 347 – IN TRANSLATION: KALEVALA AND FINNISH FOLK-LORE**

3-4 credits.

A look at the Kalevala, the Finnish creation myth and national epic of Finland, and how it affected Finnish national identity and the eventual Finnish independence from Russia.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**FOLKLORE/RELIG ST 352 – SHAMANISM**

3 credits.

Survey of shamanism as a religious tradition and sociocultural force in Siberian, Asian, and Native American societies. Exploration of shamanic rituals, roles, cosmology. Cultural and political uses of shamanism in traditional and modern contexts.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**FOLKLORE/RELIG ST 359 – MYTH**

3 credits.

The relationship between myth and tale, history, culture. Myth research; methodological approaches; world mythologies; myth and modern times.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**FOLKLORE 399 – DIRECTED STUDY IN FOLKLORE FOR UNDERGRADUATES**

1-3 credits.

Directed study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**FOLKLORE/MUSIC 402 – MUSICAL CULTURES OF THE WORLD**

3 credits.

Explores the performance, transmission, and consumption of traditional and popular musics outside of the standard Euro-American context.

Employs musical-analytic and critical approaches to trace transnational musical circulation.

**Requisites:** MUSIC 212

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**FOLKLORE 415 – ADVANCED TOPICS IN FOLKLORE**

1-3 credits.

Exploration of various topics in the study of folklore, folklife, myth, foodways, or music.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FOLKLORE/DANCE/THEATRE 421 – JAVANESE PERFORMANCE REPERTORY**

2 credits.

Introduction to Javanese theatre performance in a Javanese epic tradition. Includes use of Javanese gamelan music as accompaniment for dance drama.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**FOLKLORE/GEN&WS 428 – GENDER AND EXPRESSIVE CULTURE**

3 credits.

Examines the relationship between dominant images of gender representation as they emerge in expressive culture in various societies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**FOLKLORE 430 – TOPICS IN AMERICAN FOLKLORE: ETHNIC STUDIES**

3-6 credits.

Topics in historical or contemporary folklore and folklife pertaining to persistently marginalized racial or ethnic groups in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FOLKLORE/AMER IND/ANTHRO 431 – AMERICAN INDIAN FOLKLORE**

3 credits.

An introduction to the genres of American Indian Folklore. Special attention is given to creation stories, trickster tales, and the relationship between folklore and historical memory.

**Requisites:** Junior standing and (ANTHRO/AMER IND/ANTHRO 314, FOLKLORE 100, 230, or 320), or graduate/professional standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015



### FOLKLORE/AMER IND/ANTHRO/GEN&WS 437 – AMERICAN INDIAN WOMEN

3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### FOLKLORE 439 – FOODWAYS

3 credits.

Explores artistic, social, sensory, and spiritual expressions through food that convey personal, group, and place-based identities, ethnicity, gender, and class in work and play. Reviews range of food writing and scholarly perspectives including culinary historical, structural-functional, and performance.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### FOLKLORE/SCAND ST 440 – SCANDINAVIAN AMERICAN FOLKLORE

3 credits.

Examines the verbal, musical, customary, and material folklore of Scandinavian Americans, with emphasis on the upper Midwest.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### FOLKLORE/SCAND ST 443 – SAMI CULTURE, YESTERDAY AND TODAY

4 credits.

Interdisciplinary study of Sami (Lapp) people of Scandinavia past and present. Indigenous modes of expression and worldview, contemporary cultural and political activism. Extensive discussion of connections to Native American and Inuit experiences; rise of U.S. and other indigenous peoples' movements.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### FOLKLORE/SLAVIC 444 – SLAVIC AND EAST EUROPEAN FOLKLORE

3 credits.

Oral traditional literature of Eastern Europe: ritual and lyric poetry, epic, and folktale.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### FOLKLORE/MEDIEVAL/SCAND ST 446 – CELTIC-SCANDINAVIAN CULTURAL INTERRELATIONS

3 credits.

Examination of shared traditions and historical connections between the North and Northwest of Europe. Readings of medieval and pre-modern Scandinavian, Scottish, Welsh and Irish sagas, histories, talks. Discussion of the role of folklore in modern Celtic and Scandinavian societies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### FOLKLORE 451 – THE SUPERNATURAL IN THE MODERN WORLD

3 credits.

Explores evidence of belief in the supernatural in the modern world as it appears in the context of folk religion, folk medicine, legends, folk drama, ritual and custom, and media accounts and presentations. Surveys scholarly approaches to the topic.

**Requisites:** Junior standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### FOLKLORE 460 – FOLK EPICS

3 credits.

Oral nature, structure, performance traditions, and epic ideology, from various world areas.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**FOLKLORE/GEN&WS 467 – WOMEN AND POLITICS IN POPULAR CULTURE AND FOLKLORE**

3 credits.

How popular culture and folklore have been used by women as rhetorical tools that promote deliberation and debate, broaden political engagement, and advance particular social identities. Global content, with examples from around the world.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2016**FOLKLORE/GEN&WS 468 – FEMINISM, FOLKLORE AND COMPARATIVE LITERATURE**

3 credits.

Explores feminism, folklore and comparative literature from a variety of perspectives drawing from scholarship in feminist philosophy, folklore, anthropology, critical cultural studies, and postcolonial theory.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**FOLKLORE/L I S 490 – FIELD METHODS AND THE PUBLIC PRESENTATION OF FOLKLORE**

3 credits.

Combines a fieldwork practicum with scrutiny of the cultural, political, and ethical dimensions underlying the documentation and public presentation of folklore through festivals, exhibitions, publications, audio-visual productions, and digital archival collections.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2019**FOLKLORE 491 – PRACTICUM IN PUBLIC FOLKLORE**

1-3 credits.

Work as an intern with a public agency or a private non-profit organization involved in public folklore projects.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**FOLKLORE 510 – FOLKLORE THEORY**

3 credits.

Symbolical, psychoanalytic, Marxian, structuralist and performance theory models for analyzing expressive culture. Topics include play, ritual, festival, food, customs, class and the symbolism, structure and politics of narrative.

**Requisites:** 3 credits in ANTHRO or FOLKLORE**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**FOLKLORE/MUSIC 515 – PROSEMINAR IN ETHNOMUSICOLOGY**

3 credits.

Introduction to ethnomusicology, including historical survey of major works in the field, classification of musical instruments, measurement of tuning systems and concepts of scale, mode and rhythm in non-Western music.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**FOLKLORE/MUSIC 516 – ETHNOGRAPHIC METHODS FOR MUSIC AND SOUND**

3 credits.

Focuses on the tools (material, methodological, and ethical) for doing ethnographic fieldwork in musical contexts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOLKLORE 518 – THE SCOTTISH TRADITION**

3 credits.

Study of the Scottish literary tradition from the Middle Ages to the present day, with an emphasis on folk culture and its influence.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016

**FOLKLORE/ANTHRO 520 – ETHNIC REPRESENTATIONS IN WISCONSIN**

4 credits.

Representation and self-representation of ethnic cultures in Wisconsin. For example: museums, mass media, ethnic theater.

**Requisites:** ANTHRO 300, FOLKLORE 100, FOLKLORE/GNS/ FOLKLORE 200, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**FOLKLORE/COM ARTS 522 – DIGITAL STORYTELLING FOR SOCIAL MEDIA**

3 credits.

Explore everyday communication in social media. Learn digital recording technologies for documenting everyday communication and the use of digital content in social media.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**FOLKLORE 530 – TOPICS IN FOLKLORE**

1-3 credits.

Topics in Folklore in various cultures and time periods.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**FOLKLORE 540 – LOCAL CULTURE AND IDENTITY IN THE UPPER MIDWEST**

3 credits.

Addresses different aspects of community life and culture in the Upper Midwest; topics include ethnic groups, religious life, cultural landscapes, oral narrative, music, and material culture.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**FOLKLORE 699 – INDEPENDENT STUDY IN FOLKLORE (GRADUATE)**

1-3 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**FOLKLORE/MUSIC 915 – SEMINAR IN ETHNOMUSICOLOGY**

3 credits.

Topics in ethnomusicology within a cross-cultural framework; melodic typology, scale and tuning systems, mode, rhythm, ornamentation, improvisation techniques, oral and written traditions of composition, notation systems, and function of music society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**FOLKLORE 970 – SEMINAR IN FOLKLORE**

3 credits.

Thorough study of significant folklore topics. Content will vary with each offering.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**FOOD SCIENCE (FOOD SCI)****FOOD SCI 120 – SCIENCE OF FOOD**

3 credits.

Relationship between food, additives, processing and health. How foods are processed. Current food controversies.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**FOOD SCI 140 – THE CHOCOLATE EXPERIENCE: SCIENCE, SOCIETY, AND SUSTAINABILITY**

3 credits.

Learn about the history of cocoa and chocolate production, the cultivation of cocoa and processing of cocoa beans to the production of chocolate from cocoa beans. Other topics covered include nutrition and health aspects of cocoa and chocolate consumption and socioeconomic and sustainability issues in cocoa production.

**Requisites:** None

**Repeatable for Credit:** No

**FOOD SCI 150 – FERMENTED FOOD AND BEVERAGES: SCIENCE, ART AND HEALTH**

3 credits.

Explores the science behind fermented food and beverages, popularized by brewing, winemaking and breadmaking at home and in retail. Introduces the scientific principles that underlie food and beverage processing through fermentation. Covers how basic sciences such as chemistry, biochemistry and microbiology influence the process and desired outcomes when fermenting vegetables, milk, fruit, and grains.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**FOOD SCI 201 – DISCOVERING FOOD SCIENCE**

1 credit.

Provides a brief introduction to the different areas of study and career opportunities within the food industry.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for honors students under direct guidance of a faculty member in an area encompassing Food Science. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**FOOD SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area encompassing Food Science. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**FOOD SCI 301 – INTRODUCTION TO THE SCIENCE AND TECHNOLOGY OF FOOD**

3 credits.

Introduction to the science and the technology of food manufacture. Covers the basic chemical, physical and microbiological properties of food and manipulation of these properties in the manufacture of food products.

**Requisites:** (MATH 112, 114 or 217) and (CHEM 103, 109 or 115) and (BIOLOGY/ZOOLOGY/BIOLOGY 101, 102, BIOLOGY/BOTANY/BIOLOGY 130, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151) or (BSE349 or concurrent enrollment)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI/AN SCI 305 – INTRODUCTION TO MEAT SCIENCE AND TECHNOLOGY**

4 credits.

Application of biological, technological, and economical principles to muscle and related tissue utilized for food.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) and (CHEM 103, 109, or 115) or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI/AN SCI 321 – FOOD LAWS AND REGULATIONS**

1 credit.

Food laws and regulations, regulatory and commercial grading standards used in the food industry.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI/MICROBIO 324 – FOOD MICROBIOLOGY LABORATORY**

2 credits.

Lab exercises dealing with food preservation, spoilage, and food poisoning. Isolation, identification and quantification of specific microbes occurring in foods, and food fermentations by bacteria and yeast.

**Requisites:** (MICROBIO 102 or MICROBIO 304) and MICROBIO/FOOD SCI/MICROBIO 325 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI/MICROBIO 325 – FOOD MICROBIOLOGY**

3 credits.

Principles of food preservation, epidemiology of foodborne illness, agents of foodborne illness, food fermentations and biotechnology.

**Requisites:** MICROBIO 101, 303, or M M & I 301 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI 375 – SPECIAL TOPICS**

1-3 credits.

Subjects of current interest to undergraduates.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**FOOD SCI 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in the Food Science department and a internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**FOOD SCI 400 – STUDY ABROAD IN FOOD SCIENCE**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**FOOD SCI 410 – FOOD CHEMISTRY**

3 credits.

Nature and chemical behavior of food constituents including proteins, lipids, carbohydrates, water, and enzymes.

**Requisites:** FOOD SCI 301, CHEM 343, and (BIOCHEM 501 or concurrent enrollment)**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI 412 – FOOD ANALYSIS**

4 credits.

Application of quantitative techniques to the determination of composition and quality of food products.

**Requisites:** (STAT 301 or 371) and FOOD SCI 410**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 432 – PRINCIPLES OF FOOD PRESERVATION**

3 credits.

Fundamentals of food preservation methods: post-harvest, thermal processing, refrigeration and freezing, control of water activity, chemical preservation, nonthermal methods and control of food packaging.

**Requisites:** FOOD SCI/MICROBIO/FOOD SCI 325, FOOD SCI 410, and 440**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 437 – FOOD SERVICE OPERATIONS**

4 credits.

Fundamentals, principles, and practices of the United States Food Systems, Food Service, and Food Service Management. Introduction to the food service industry as applied in diverse settings, including but not limited to schools, hospitals and restaurants.

**Requisites:** FOOD SCI 301 and declared in Nutritional Sciences BS or BS-Nutrition and Dietetics**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI 440 – PRINCIPLES OF FOOD ENGINEERING**

3 credits.

Application of engineering principles in the analysis of food process operations: properties of gases and vapors, psychrometrics, material and energy balances, fluid flow, heat transfer, microwave heating, mass transfer, packaging film permeability, dehydration.

**Requisites:** FOOD SCI 301, (MATH 217 or 221), and (PHYSICS 201 or 207)**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI/AN SCI/DY SCI/SOIL SCI 472 – ANIMAL AGRICULTURE AND GLOBAL SUSTAINABLE DEVELOPMENT**

1 credit.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; food security, the role of women in agriculture, and the role of dairy products in a healthy diet.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2022**FOOD SCI/AN SCI/DY SCI/SOIL SCI 473 – INTERNATIONAL FIELD STUDY IN ANIMAL AGRICULTURE AND SUSTAINABLE DEVELOPMENT**

2 credits.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; and the role of women in agriculture and the role of dairy products in a healthy diet.

**Requisites:** DY SCI/AN SCI/FOOD SCI/SOIL SCI 472**Repeatable for Credit:** No

**FOOD SCI 511 – CHEMISTRY AND TECHNOLOGY OF DAIRY PRODUCTS**

3 credits.

Chemistry of milk components (i.e. protein, lipids, carbohydrate, salts, enzymes) with an emphasis on chemical and physical changes that occur during the manufacture of a range of milk products (i.e. ice cream, butter, cheese). Dairy technology and microbiological quality.

**Requisites:** FOOD SCI 410**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 514 – INTEGRATED FOOD FUNCTIONALITY**

4 credits.

Molecular basis of food functional properties; impact of ingredients and processing on functional properties (texture, flavor, nutrition and structure); design of new or reformulating foods to meet specific quality expectations.

**Requisites:** FOOD SCI 602**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI/AN SCI 515 – COMMERCIAL MEAT PROCESSING**

2 credits.

Principles and procedures in the commercial manufacture of processed meat products; sausage manufacturing, curing, smoking, freezing and packaging.

**Requisites:** AN SCI/FOOD SCI 305, FOOD SCI 410, or graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 532 – INTEGRATED FOOD MANUFACTURING**

4 credits.

Procedures used to process and preserve foods on a commercial basis, with emphasis on concentration, dehydration and fractionation process, plant sanitation/GMP, statistical process control, and environmental impacts..

**Requisites:** FOOD SCI 432 or (BSE 461 or concurrent enrollment)**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI 535 – CONFECTIONERY SCIENCE AND TECHNOLOGY**

3 credits.

Through a combination of on-line lectures, classroom activities, evaluation of commercial samples and discovery-based labs, the science and technology of confections from hard candy to chocolate will be covered.

**Requisites:** FOOD SCI 410 and FOOD SCI 432**Repeatable for Credit:** No**Last Taught:** Fall 2022**FOOD SCI 537 – ORGANIZATION AND MANAGEMENT OF FOOD AND NUTRITION SERVICES**

3 credits.

Principles of organization; the management process in foodservice systems; allocation of resources; budget development, personnel supervision and evaluation.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2015**FOOD SCI 550 – FERMENTED FOODS AND BEVERAGES**

2 credits.

Chemistry, microbiology, and technology of foods and beverages in which fermentations are important (e.g. cheese, bread, pickles, beer). Fermentation techniques in developing new foods and food additives. Instrumentation and mechanization of food fermentations.

**Requisites:** BIOCHEM 501**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 551 – FOOD FERMENTATION LABORATORY**

1 credit.

Offers the opportunity to learn to produce fermented beverages and dairy products in laboratory and scalable production facilities. Designed to introduce the chemical and physical basis for development of specific characteristics associated with individual styles of products as well as analytical methods to qualify those characteristics. Enrollment limited to students 21 years of age or older

**Requisites:** FOOD SCI 550 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023**FOOD SCI 552 – FOOD FERMENTATION LABORATORY: THE SCIENCE OF WINE**

1 credit.

Provides opportunities to apply and further develop understanding of fermentation science through the production and analysis of wine. Learn to produce wine at the laboratory and commercial scale. Introduces the chemical constituents of wine through laboratory analysis.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2018**FOOD SCI 602 – SENIOR PROJECT**

2 credits.

Part one of senior capstone requirement. Working as teams, students conduct research around a problem pertinent to the food industry. Weekly discussions plus laboratory. Data collection and analysis and report writing are critical components of this course.

**Requisites:** FOOD SCI 412 and 432**Repeatable for Credit:** No**Last Taught:** Fall 2022



**FOOD SCI 603 – SENIOR SEMINAR**

1 credit.

Part two of senior capstone requirement. Students will present data gathered and analyzed as part of the senior project.

**Requisites:** FOOD SCI 602

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FOOD SCI 610 – FOOD PROTEINS**

2 credits.

Protein structure and functions; techniques of protein isolation and characterization; functional properties important in food processing.

**Requisites:** BIOCHEM 501 or 601

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**FOOD SCI 611 – CHEMISTRY AND TECHNOLOGY OF DAIRY PRODUCTS**

3 credits.

Chemistry of milk components (i.e. protein, lipids, carbohydrate, salts, enzymes) with an emphasis on chemical and physical changes that occur during the manufacture of a range of milk products (i.e. ice cream, butter, cheese). Dairy technology and microbiological quality.

**Requisites:** FOOD SCI 410 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FOOD SCI 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2013

**FOOD SCI 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2014

**FOOD SCI 699 – SPECIAL PROBLEMS**

1-3 credits.

Individual advanced work in an area of Food Science under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FOOD SCI/AN SCI 710 – CHEMISTRY OF THE FOOD LIPIDS**

2 credits.

Chemical constitution, structures, reactions, stereochemistry of fats, phospholipids, related compounds; methods of isolation, characterization; synthesis; relation of structure to physical properties.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FOOD SCI/AN SCI 711 – FOOD BIOCHEMISTRY**

3 credits.

Explores methods for interrogating structure-function relationships, molecular profiles, and microstructure of foods. Provides hands-on experience using computational approaches to model protein-small molecule interactions, analysis of small molecules using high-resolution MS, and protein composition and morphology with fluorescence spectroscopy and microscopy. Knowledge of food chemistry or organic chemistry (such as FOOD SCI 410, CHEM 341, 343, or 345) required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**FOOD SCI 725 – ADVANCED FOOD MICROBIOLOGY**

3 credits.

Principles and problems covering fundamental concepts in Food Microbiology; application of concepts in fermentation, pathogenesis, and gut health; development and control of a sustainable and safe food and fiber system.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**FOOD SCI 799 – PRACTICUM IN FOOD SCIENCE TEACHING**

1-3 credits.

Teaching experience for PhD candidates.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**FOOD SCI 875 – SPECIAL TOPICS**

1-3 credits.

New graduate and courses of current interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FOOD SCI 900 – SEMINAR ADVANCED**

1 credit.

Research literature and current departmental research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FOOD SCI 990 – RESEARCH**

1-12 credits.

Full lab and literature review of a problem in food science. Leads to preparation of thesis and publication.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## FOREST AND WILDLIFE ECOLOGY (F&W ECOL)

**F&W ECOL 1 – COOPERATIVE EDUCATION/CO-OP IN FOREST & WILDLIFE ECOLOGY**

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working. The same work experience may not count towards credit in F&W ECOL 399.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**F&W ECOL/ENVIR ST 100 – FORESTS OF THE WORLD**

3 credits.

Ecology and conservation of a wide range of forests, from tropical rain and dry forests, boreal forests, to temperate forests, outside of the USA. The main threats to forests, and different strategies to solve conservation and sustainable management issues in international forestry. Trade-offs in forest conservation and management, resulting from different values that people place on forests, issues in equity and equality in access to forest resources. The role of forests in climate change and extinction of species.

**Requisites:** None**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 101 – ORIENTATION TO WILDLIFE ECOLOGY**

1 credit.

Introduction to Wildlife Ecology and the profession of wildlife management/conservation. Emphasis on preparing for a successful career.

**Requisites:** Declared in Wildlife Ecology**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 110 – LIVING WITH WILDLIFE - ANIMALS, HABITATS, AND HUMAN INTERACTIONS**

3 credits.

A general survey of wildlife and wildlife conservation. Basic characteristics and management of wildlife populations and habitats. Human perceptions and interactions with wildlife. Current issues in wildlife management and conservation.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL/C&E SOC/SOC 248 – ENVIRONMENT, NATURAL RESOURCES, AND SOCIETY**

3 credits.

Introduces the concerns and principles of sociology through examination of human interaction with the natural environment. Places environmental issues such as resource depletion, population growth, food production, environmental regulation, and sustainability in national and global perspectives.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**F&W ECOL/BOTANY 250 – FORESTS AND HUMANS: FROM THE MIDWEST TO MADAGASCAR**

2 credits.

Provides an overview of the geography, ecology, and economic importance of the world's forest biomes. Learn how climate influences vegetation and, in-turn, how forests impact global climate. Meet scientists working to understand the astounding biodiversity and ecological complexity of forest ecosystems, and how these ecosystems support human life. Discuss the threats to forest ecosystems around the world, and hear from the people trying to protect them. Emphasizes the forest resources and services upon which humans depend, and how we can maintain these resources into the future. Analyze the idea of "sustainability" when it comes to forest management, hear alternative viewpoints about what this word means, and discuss potential trade-offs and conflicts. Look at the many real-world programs in place at the global, national, and local level to sustainably manage forests.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2020**F&W ECOL 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area of Forest and Wildlife Ecology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**F&W ECOL 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area of Forest and Wildlife Ecology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL 300 – FOREST BIOMETRY**

4 credits.

Basic concepts of statistical inference and sampling theory as applied to forestry. Estimation of tree and forest characteristics. Use of aerial photographs; principles of data processing; information gathering and decision making under uncertainty.

**Requisites:** STAT 301, 371, or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 305 – FOREST OPERATIONS**

2 credits.

Introduction to forestry operations in the implementation of forest plans, including site preparation, stand establishment, and harvesting systems. Analysis of costs and productivity, including system balance, marketing, timber procurement, and contractual services.

**Requisites:** F&W ECOL 300 or 410**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 306 – TERRESTRIAL VERTEBRATES: LIFE HISTORY AND ECOLOGY**

4 credits.

Life history, ecology, distribution, and taxonomy of reptiles, amphibians, birds, and mammals. Birds will receive less emphasis. Primary focus is on Wisconsin species, including conservation threats, but covers all major North American families, and surveys major groups of the world. Designed as a foundation for detailed study of vertebrates or to satisfy the need for a scientific introduction to Wisconsin vertebrates.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), (BIOCORE 381 and 382), or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL/HORT/LAND ARC/PL PATH 309 – DISEASES OF TREES AND SHRUBS**

3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Includes field trips

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**F&W ECOL 318 – PRINCIPLES OF WILDLIFE ECOLOGY**

3 credits.

Major environmental factors affecting wildlife; structure and behavior of wildlife populations; regional wildlife communities and their conservation.

**Requisites:** Declared in Wildlife Ecology**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**F&W ECOL/ZOOLOGY 335 – HUMAN/ANIMAL RELATIONSHIPS: BIOLOGICAL AND PHILOSOPHICAL ISSUES**

3 credits.

An interdisciplinary approach to our complex and often contradictory relationships with non-human animals, including information about the nature, needs and behavior of human and non-human animals in relation to our personal and professional interactions with them.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL/ENVIR ST/ZOOLOGY 360 – EXTINCTION OF SPECIES**

3 credits.

A comprehensive treatment of the ecology, causes, and consequences of species extinction. Ecology and problems of individual species, habitat alteration and degradation, socio-economic pressures and conservation techniques and strategies.

**Requisites:** Sophomore standing and BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 151, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BOTANY/BIOLOGY/BOTANY 130, or (BIOCORE 381 and 382)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/ENVIR ST/G L E/GEOG/GEOSCI/LAND ARC 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**

3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/ professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL/ENVIR ST/G L E/GEOG/GEOSCI/LAND ARC 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**F&W ECOL 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**F&W ECOL 379 – PRINCIPLES OF WILDLIFE MANAGEMENT**

3 credits.

Ways of conserving desired numbers of animals for the overall best interests of society, be they aesthetic, ecological, economic, commercial or recreational; includes management of endangered species, exploited species, wildlife communities in nature reserves, and wildlife pests.

**Requisites:** F&W ECOL 318 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL 390 – LEARNING TO ACTION: PROFESSIONAL DEVELOPMENT**

1 credit.

Preparation for natural resources professions and the job market after graduation. Development of professional skills including communication, ethical decision-making, and conflict resolution. Experience in job searching, editing resumes, and interviewing for jobs.

**Requisites:** Declared in Forest Science

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**F&W ECOL 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Forest and Wildlife Ecology and an internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL 400 – STUDY ABROAD IN FOREST AND WILDLIFE ECOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**F&W ECOL 401 – PHYSIOLOGICAL ANIMAL ECOLOGY**

3 credits.

Physiological adaptation and function in wild animals, primarily birds, mammals, reptiles, amphibians. Focus on interactions between animals and their environment, and relationships between animal physiology and the ecology and dynamics of populations.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), (BIOCORE 381 and 382), or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**F&W ECOL/BOTANY 402 – DENDROLOGY**

2 credits.

Identification, ranges, uses, and some ecological characteristics of evergreen and deciduous woody plants, both native and cultivated; lab and field work.

**Requisites:** Sophomore standing; not open to special students**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 404 – WILDLIFE DAMAGE MANAGEMENT**

3 credits.

Theory and application of wildlife management from a species-specific and situational perspective. Introduction to career options in wildlife damage management.

**Requisites:** F&W ECOL 379**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 410 – PRINCIPLES OF SILVICULTURE**

3 credits.

Ecologically-based forest management principles for sustainable timber production, maintenance or restoration of biological diversity, and maintenance of aesthetic quality and site productivity. Includes coverage of even-aged and uneven-aged management, reforestation principles, and ecological restoration techniques.

**Requisites:** BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, F&W ECOL 550, declared in Forest Science or Wildlife Ecology, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 411 – PRACTICES OF SILVICULTURE**

1 credit.

Utilization of ecologically-based forest management practices for sustainable timber production, maintenance or restoration of biological diversity, and maintenance of aesthetic quality and site productivity. Includes coverage of even-aged and uneven-aged management, reforestation principles, and ecological restoration techniques.

**Requisites:** F&W ECOL 410 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 415 – TREE PHYSIOLOGY**

3 credits.

Physiological basis of development of forest trees and stands, factors affecting tree growth.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020

**F&W ECOL 424 – WILDLIFE ECOLOGY SUMMER FIELD PRACTICUM**

2 credits.

Practicum emphasizing research and habitat management techniques through individual and group field work, tours, demonstrations and lectures.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**F&W ECOL 448 – DISTURBANCE ECOLOGY**

3 credits.

An introduction to fire, wind, flooding, disease, insects and other disturbance regimes that serve as primary drivers of the structure and function of terrestrial ecosystems. Discusses how these disturbances interact, using case studies and data that highlight the role of disturbance in different ecosystems (e.g. grasslands, forests, tundra) with a focus on the ecosystem services they provide. Discusses and critiques management strategies used to mitigate biotic and abiotic disturbances, gaining critical insights from the literature as well as personal perspectives and experiences.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**F&W ECOL 449 – DISTURBANCE ECOLOGY LAB (I): HERBIVORES AND FIRE**

1 credit.

Explores natural and anthropogenic disturbances occurring in forest ecosystems through hands on learning experiences. Emphasis on the role of herbivores and fire with examination of management strategies. Applies basic ecological laboratory and field techniques to understanding disturbances that change the physical environment and disrupt ecosystem structure.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**F&W ECOL 450 – DISTURBANCE ECOLOGY LAB (II): FOREST PATHOGENS**

1 credit.

Explores natural and anthropogenic disturbances occurring in forest ecosystems through hands on learning experiences. Focuses on the causes of impoverished forests and the role and management of pathogens. Applies basic ecological laboratory and field techniques to understanding disturbances that change the physical environment and disrupt ecosystem structure.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**F&W ECOL/SOIL SCI 451 – ENVIRONMENTAL BIOGEOCHEMISTRY**

3 credits.

Emphasis is given to a consideration of the processes influencing the distribution and cycling of chemical elements in native and anthropogenic ecosystem-level cycles of elements, and biogeochemical cycling in major soil-biome systems.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/BOTANY 455 – THE VEGETATION OF WISCONSIN**

4 credits.

Ecology of Wisconsin plant communities: floristic composition, community structure; relationship to history, climate, soil, and geology; response to human perturbation.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL 458 – ENVIRONMENTAL DATA SCIENCE**

3 credits.

Introduces fundamental machine learning techniques for numerical modeling and data analysis and modern computer programming tools used to analyze, prepare, and visualize data from common formats of datasets in the field of Earth and environmental sciences. Emphasizes opportunities to consider real-world applications for concepts in environmental data science.

**Requisites:** STAT 240, 301, 324, 371, or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No



**F&W ECOL/BOTANY/ZOOLOGY 460 – GENERAL ECOLOGY**

4 credits.

Ecology of individual organisms, populations, communities, ecosystems, landscapes, and the biosphere. The interaction of organisms with each other and their physical environment. These relationships are studied, often in quantitative terms, in both field and laboratory settings.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOCORE 381, or BIOLOGY/BOTANY/BIOLOGY 130, or graduate/professional standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Biological Sci. Counts toward the Natural Sci req  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL/ENTOM 500 – INSECTS IN FOREST ECOSYSTEM FUNCTION AND MANAGEMENT**

2 credits.

Roles of insects in the functioning of healthy forest ecosystems, tactics for addressing challenges they pose to sustainable natural resource management, and emerging issues such as biological invasions, habitat alteration, and climate change that influence interactions among insects, their microbial associates, forests, and humans.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**F&W ECOL 501 – FOREST FIRE BEHAVIOR AND MANAGEMENT**

1 credit.

Principles and applications of forest fire behavior, prediction, control and use; current policy issues in fire management.

**Requisites:** FW ECOL/ENVIR ST/F&W ECOL 100

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**F&W ECOL/ENVIR ST 515 – NATURAL RESOURCES POLICY**

3 credits.

Examine natural resources policy and law in the United States relating to forests, wildlife, and other natural resources. Investigates the policy-making process and the role of science, values, property, economics, and justice in the development of federal and state resources policy. Practice professional written and oral communication and ethical engagement in resources policy and administration.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/AN SCI/ZOOLOGY 520 – ORNITHOLOGY**

3 credits.

Introduction to bird biology, ecology, and behavior. Topics include the evolutionary origin of birds and flight, anatomy and physiology, functional morphology, migration, communication, reproductive strategies, ecological adaptations and roles, and biogeographical patterns.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL/AN SCI/ZOOLOGY 521 – BIRDS OF SOUTHERN WISCONSIN**

3 credits.

Outdoor and indoor labs/lectures emphasizing identification of southern Wisconsin birds by sight and vocalization. Two required Saturday field trips in Southern Wisconsin.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL/HORT/SOIL SCI 524 – URBAN SOIL AND ENVIRONMENT**

3 credits.

Many environmental issues related to urbanization are derived from the manipulation of soil. By coupling contemporary literature in urban soils with soil science, students will be able to evaluate environmental issues within the urban environment and provide new ways of remediating their impact.

**Requisites:** (PHYSICS 103, 201, 207, or 247) and (ENVIR ST/GEOG/ SOIL SCI/ENVIR ST/GEOG 230 or SOIL SCI 301 or concurrent), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**F&W ECOL/A A E/ECON 531 – NATURAL RESOURCE ECONOMICS**

3 credits.

Economic concepts and tools relating to management and use of natural resources, including pricing principles, cost-benefit analysis, equity, externalities, economic rent, renewable and nonrenewable resources, and resource policy issues.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/SURG SCI 548 – DISEASES OF WILDLIFE**

3 credits.

Provides an overview of the issues involved across a wide range of wildlife diseases, presented within the context of ecosystem health or "one health". Content will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. Covers a wide variety of wildlife diseases caused by bacteria, viruses, parasites, prions, and environmental contaminants. Consequences associated with environmental changes on the manifestation of wildlife diseases will also be discussed. This range of diseases will be presented in order to familiarize the many facets involved in disease management, from animal and human health issues, to ecological and environmental considerations, to the role of society in contributing to, and managing, these diseases.

**Requisites:** BOTANY/BIOLOGY 130, (ZOOLOGY/BIOLOGY 101 102), BIOLOGY/BOTANY/ZOOLOGY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**F&W ECOL 550 – FOREST ECOLOGY**

3 credits.

Introduction to major abiotic and biotic factors that influence forest ecosystem composition, structure, and function. Reviews important processes that influence structure and function of forest ecosystems. Uses basic ecosystem concepts to elucidate influence of anthropogenic (including forest management) and natural disturbances on forest ecosystem structure and function.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL 551 – FOREST ECOLOGY LAB**

1 credit.

Review concepts presented in F&W ECOL 550 by exposing the key concepts and processes discussed that can best be seen in the field or illustrated with the use of ecosystem models.

**Requisites:** F&W ECOL 550 or concurrent enrollment, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL 561 – WILDLIFE MANAGEMENT TECHNIQUES**

3 credits.

Preparation of collections, analyses of food habits, sex and age determinations, censuses, trapping and banding, planting food and cover, research techniques.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/LAND ARC/ZOOLOGY 565 – PRINCIPLES OF LANDSCAPE ECOLOGY**

2 credits.

Emphasizes the importance of spatial patterns at broad scales. Concepts and applications are covered.

**Requisites:** (BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460 or F&W ECOL 550) and (STAT 301, 371, or STAT/FW ECOL/HORT/ F&W ECOL/STAT 571), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**F&W ECOL/HORT/STAT 571 – STATISTICAL METHODS FOR BIOSCIENCE I**

4 credits.

Descriptive statistics, distributions, one- and two-sample normal inference, power, one-way ANOVA, simple linear regression, categorical data, non-parametric methods; underlying assumptions and diagnostic work.

**Requisites:** Graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/HORT/STAT 572 – STATISTICAL METHODS FOR BIOSCIENCE II**

4 credits.

Polynomial regression, multiple regression, two-way ANOVA with and without interaction, split-plot design, subsampling, analysis of covariance, elementary sampling, introduction to bioassay.

**Requisites:** FW ECOL/HORT/STAT/F&W ECOL/HORT 571

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL 577 – COMPLEXITY AND CONSERVATION OF WHITE-TAILED DEER**

3 credits.

Solve problems that arise in the conservation and management of wildlife populations requires that managers understand and evaluate human cultural, economic, and political issues in addition to ecological issues. Use case studies to understand the interdisciplinary nature of wildlife management while gaining practical hands-on experiences.

**Requisites:** Declared in Wildlife Ecology and Junior Standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL 590 – INTEGRATED RESOURCE MANAGEMENT**

3 credits.

Resource management planning in state and federal land management agencies. Apply principles by working in teams to develop a management plan for a real property by inventorying resources; developing management objectives and alternatives; and analyzing their ecological, social and institutional implications.

**Requisites:** Declared in Forest Science, Junior Standing, and F&W ECOL 658

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL 599 – WILDLIFE RESEARCH CAPSTONE**

3 credits.

Synthesize concepts in wildlife ecology and prepare for a wildlife research career. Develop a professional-quality research proposal for an extended project, carry out a pilot ecological field study, and design and implement a social survey questionnaire.

**Requisites:** F&W ECOL 561

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**F&W ECOL/ENTOM/PL PATH/SOIL SCI 606 – COLLOQUIUM IN ENVIRONMENTAL TOXICOLOGY**

1 credit.

Current topics in molecular and environmental toxicology and problems related to biologically active substances in the environment. Topics vary each semester. Lectures are by resident and visiting professors and other researchers.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 or BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**F&W ECOL/AGRONOMY/ENTOM/M&ENVTOX 632 – ECOTOXICOLOGY: THE CHEMICAL PLAYERS**

1 credit.

Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment.

**Requisites:** (CHEM 341 or 343) and ((BIOLOGY/BOTANY/BIOLOGY 130 and BIOLOGY/ZOOLOGY/BIOLOGY 102) or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 383); or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**F&W ECOL/AGRONOMY/ENTOM/M&ENVTOX 633 – ECOTOXICOLOGY: IMPACTS ON INDIVIDUALS**

1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates).

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/ AGRONOMY/ENTOM/F&W ECOL 632

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**F&W ECOL/AGRONOMY/ENTOM/M&ENVTOX 634 – ECOTOXICOLOGY: IMPACTS ON POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

1 credit.

Focuses on the impact of toxicants on populations, communities, ecosystems, and includes risk evaluation. Includes lectures, current research presentations, and discussions.

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/ AGRONOMY/ENTOM/F&W ECOL 633 or declared in Molecular and Environmental Toxicology, PhD program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**F&W ECOL/BOTANY/ENVIR ST/ZOOLOGY 651 – CONSERVATION BIOLOGY**

3 credits.

Application of ecological principles and human dimensions to the conservation of biological diversity. Topics: biodiversity science; conservation planning; population ecology; habitat loss, species exploitation, invasive species, pollution; human attitudes and activities as they affect the biosphere; approaches to monitoring interventions.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BOTANY/ZOOLOGY/BOTANY 450, BOTANY/F&W ECOL/BOTANY 455, BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/A A E/ENVIR ST 652 – DECISION METHODS FOR NATURAL RESOURCE MANAGERS**

3–4 credits.

Applications of quantitative methods, including optimization and simulation, to the management of natural resources, especially forests.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Breadth - Biological Sci. Counts toward the Natural Sci req Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL 655 – ANIMAL POPULATION DYNAMICS**

3 credits.

Fluctuations of animal populations: techniques of study, documentation, controls.

**Requisites:** FW ECOL/LAND ARC/ZOOLOGY/F&W ECOL/ LAND ARC 565 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**F&W ECOL 658 – FOREST RESOURCES PRACTICUM**

3 credits.

Field training and experience; exposure to forestry operations, equipment, procedures, and management problems.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**F&W ECOL/ZOOLOGY 660 – CLIMATE CHANGE ECOLOGY**

3 credits.

The evidence that the Earth's climate is changing at unprecedented rates is now overwhelming. Environmental tipping points are being crossed and many species are adapting or failing to adapt. Climate change poses a significant problem for conserving and managing wildlife and their habitats. Climate change and its ecological impacts will be discussed and analyzed.

**Requisites:** (Declared in Forest Science or Wildlife Ecology and Junior standing), BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**F&W ECOL/BOTANY/ZOOLOGY 672 – HISTORICAL ECOLOGY**

2 credits.

Study the importance of past events for current ecosystems. Emphasizes concepts and applications.

**Requisites:** Senior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**F&W ECOL 675 – PROFESSIONAL DEVELOPMENT IN FOREST & WILDLIFE ECOLOGY**

1 credit.

Provides opportunities for additional training in professional development skills relevant to careers in natural resources.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for undergraduate students in an Honors program completing a thesis in the area of Forest and Wildlife Ecology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Forest and Wildlife Ecology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 691 – SENIOR THESIS**

2-4 credits.

Independent research for Honors students completing a thesis in the areas of Forest Science or Wildlife Ecology, under the guidance of a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 692 – SENIOR THESIS**

2-4 credits.

Independent research for Honors students completing a thesis in the areas of Forest Science or Wildlife Ecology, under the guidance of a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2022**F&W ECOL 699 – SPECIAL PROBLEMS**

1-4 credits.

Individual advanced work in an area of Forest and Wildlife Ecology under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL/ENTOM 711 – MULTIVARIATE ANALYSIS OF ECOLOGICAL AND COMMUNITY DATA**

2 credits.

Examines common methods of multivariate data analysis in ecology and environmental science. Covers methods for the analysis of complex, multidimensional datasets that are collected in the study of plant, invertebrate, fish, and bird communities. Addresses the concurrent analysis of the environmental factors that may drive community distributions. Provides the basis for predictive modeling of distributions across landscapes. General methods covered include ordination (PCA, DCA, NMDS, CCA), clustering (or classification), and other comparative analyses of data matrices (ANOSIM, Mantel tests). Includes an applied, "hands-on" approach on how to use these tools, and the circumstances under which their uses are either appropriate or inappropriate.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**F&W ECOL 799 – PRACTICUM IN FORESTRY AND WILDLIFE ECOLOGY/TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL/BOTANY/ZOOLOGY 879 – ADVANCED LANDSCAPE ECOLOGY**

3 credits.

Emphasizes spatial patterning (its development and importance for ecological processes) and often focuses on large regions. Learn concepts, methods, and applications of landscape ecology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**F&W ECOL/AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/ GEOG/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**F&W ECOL/DS/URB R PL 955 – PRACTICAL RESEARCH DESIGN AND METHODS OF EMPIRICAL INQUIRY**

3 credits.

Provides a practical introduction to basic concepts of research question formulation, research designs and alternative methods of inquiry, implications for internal validity of the research and generalizability of the findings, operational definitions and measurement validity, reliability, utility and precision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**F&W ECOL 961 – WILDLIFE SEMINAR**

1 credit.

Monthly research reports and special topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**F&W ECOL/ATM OCN/BOTANY/ENVIR ST/GEOG/GEOSCI/ ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**F&W ECOL 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**F&W ECOL 999 – ADVANCED INDEPENDENT STUDY**

1-3 credits.

Independent graduate study under supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## FRENCH (FRENCH AND ITALIAN) (FRENCH)

**FRENCH 101 – FIRST SEMESTER FRENCH**

4 credits.

Oral practice and conversation, grammar, reading, vocabulary building, and study of French and Francophone cultures.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FRENCH 102 – SECOND SEMESTER FRENCH**

4 credits.

Oral practice and conversation, grammar, reading, vocabulary building, and study of French and Francophone cultures.

**Requisites:** FRENCH 101 or placement into FRENCH 102**Course Designation:** Frgn Lang - 2nd semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FRENCH 201 – FRENCH FOR SPEAKERS OF OTHER ROMANCE LANGUAGES**

4 credits.

Accelerated development of oral, reading and writing skills up to a level equivalent to FRENCH 102. Instruction draws on features shared by Romance languages, with focus on distinctions particular to French.

**Requisites:** ITALIAN 204, SPANISH 204, or PORTUG 202. Not open to students with credit for FRENCH 102**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019



**FRENCH 203 – THIRD SEMESTER FRENCH**

4 credits.

Oral practice and conversation, grammar review, reading, vocabulary expansion, creative writing and study of French and Francophone cultures.

**Requisites:** FRENCH 102 or placement into FRENCH 203

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FRENCH 204 – FOURTH SEMESTER FRENCH**

4 credits.

Advanced oral practice and conversation, grammar review, reading, vocabulary expansion, creative writing and study of French and Francophone cultures.

**Requisites:** FRENCH 203 or placement into FRENCH 204

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FRENCH 210 – SEXUALITY AND GENDER IN 20TH-CENTURY FRENCH LITERATURE**

3 credits.

Considers novels, plays, essays, and films (in translation) written by gay and lesbian authors in 20th-century France. It traces developments in narrative and in sexual identity to show how the articulation of sexual difference influenced 20th-century literature and culture.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**FRENCH 211 – FRENCH LITERARY AND INTERDISCIPLINARY STUDIES**

3-4 credits.

An introductory, interdisciplinary area of French studies with a focus on French literary texts in English translation.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**FRENCH/AFRICAN 216 – MODERN AND CONTEMPORARY FRANCOPHONE TOPICS**

3 credits.

Modern and contemporary topics in the African francophone world, which includes both the African continent and the African diaspora. Taught in English.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**FRENCH 228 – INTERMEDIATE LANGUAGE AND CULTURE**

3-4 credits.

Enhance writing and speaking proficiency through cultural readings on France and the francophone world. Review of grammar and focus on more complex grammatical structures.

**Requisites:** FRENCH 204 or placement into FRENCH 228

**Course Designation:** Frgn Lang – 5th + semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FRENCH 248 – ETHNIC STUDIES IN THE FRENCH/FRANCOPHONE WORLD(S)**

3 credits.

An introduction to French colonialism in the New World and its effects on African-American, Afro-Creole, Native American, Franco-American, Cajun, and Caribbean diasporan communities in the U.S. through literature, history, and culture.

**Requisites:** None

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**FRENCH 271 – LITERATURE, COMICS, AND FILM IN FRENCH**

3-4 credits.

An introduction to reading and analyzing literary works, comics, and film, with special emphasis on the development of writing skills in French.

**Requisites:** FRENCH 228

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**FRENCH 285 – REBELLIOUS WOMEN**

3-4 credits.

Explores how women from different francophone regions (North and Sub-Saharan Africa and the Middle East) gain agency through literature, movies, comics, and songs, contesting different forms of domination, exclusion, and injustice, based on gender, race, class, and religion.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH 288 – DOCTORS WITHOUT BORDERS (MÉDECINS SANS FRONTIÈRES)**

3 credits.

An overview of the global humanitarian NGO, Doctors without Borders (or Médecins sans Frontières MSF) including its history, mission, organization, and the cultural, political, and ethical challenges it faces. Explores issues of global health, social justice, and humanitarian action. Features distinguished global practitioners with first-hand experience in health crisis situations.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH 298 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2006**FRENCH 299 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FRENCH 301 – PRACTICAL FRENCH CONVERSATION**

1 credit.

Enhances speaking in an informal, conversational atmosphere at the French House. Taught in French.

**Requisites:** FRENCH 203 or placement into FRENCH 204**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**FRENCH 302 – PRACTICAL FRENCH CONVERSATION**

1 credit.

Further enhances speaking in an informal, conversational atmosphere at the French House. Taught in French.

**Requisites:** FRENCH 203 or placement into FRENCH 204**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**FRENCH 311 – ADVANCED COMPOSITION AND SPEAKING**

3 credits.

Learn to write essays on a variety of topics, using different registers of French, and work to correct pronunciation and improve conversation skills. Taught in French.

**Requisites:** FRENCH 228**Course Designation:** Frgn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH 312 – ADVANCED WRITING WORKSHOP**

3 credits.

Develop writing and oral expression at an advanced level through writing and discussion of internet journalism, translation, or creative genres. Taught in French.

**Requisites:** FRENCH 228**Course Designation:** Frgn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FRENCH/INTL BUS 313 – PROFESSIONAL COMMUNICATION AND CULTURE IN THE FRANCOPHONE WORLD**

3 credits.

Study and analysis of the culture and sociology of professional environments in the French and Francophone worlds, including government, international organizations, NGO's and business. Students develop communication skills through interactive teaching methods in multimedia labs.

**Requisites:** FRENCH 228 or 311**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **FRENCH/INTL BUS 314 – CONTEMPORARY ISSUES IN GOVERNMENT, ORGANIZATIONS, AND ENTERPRISE**

3 credits.

Cultural study of contemporary Francophone Africa, focusing on issues in government, organizations and enterprise. Exploration of cultural and professional relations between Francophone Africa and France, the European Union, and the United States.

**Requisites:** FRENCH 228, 311, or FRENCH/INTL BUS/FRENCH 313

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FRENCH 316 – STUDY ABROAD: ADVANCED FRENCH LANGUAGE**

2-6 credits.

Used as a study abroad equivalent for advanced-level French language courses. Enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **FRENCH 321 – MEDIEVAL AND EARLY MODERN FRENCH LITERATURE**

3 credits.

Introduction to important literary works from the medieval era to the French Revolution. Taught in French.

**Requisites:** FRENCH 271

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FRENCH 322 – MODERN FRENCH AND FRANCOPHONE LITERATURE**

3 credits.

Introduction to important literary works of modernity (from the French Revolution to the twenty-first century). Taught in French.

**Requisites:** FRENCH 271

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FRENCH 325 – VISUAL CULTURE IN FRENCH/FRANCOPHONE STUDIES**

3 credits.

Aspects of French culture as manifested in painting, photography, film or other visual media in relation to literature. Taught in French.

**Requisites:** FRENCH 271

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **FRENCH 347 – MEDIEVAL AND EARLY MODERN CULTURE**

3 credits.

An introduction to the political, social, intellectual, artistic and literary development of French culture, from its origins to the French Revolution (1789). Taught in French.

**Requisites:** FRENCH 311, 312, 321, 322, or 325

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **FRENCH 348 – MODERNITY STUDIES**

3 credits.

An introduction to political, social, intellectual, artistic and literary developments in French and Francophone culture, within the time period from the French Revolution to the current era. Taught in French.

**Requisites:** FRENCH 271

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **FRENCH 350 – APPLIED FRENCH LANGUAGE STUDIES**

1-3 credits.

Selected applied language topics pertaining to teaching French as a second language. Taught in French.

**Requisites:** FRENCH 271 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **FRENCH 361 – STUDY ABROAD: FRENCH/FRANCOPHONE LITERATURE**

2-3 credits.

Used as a study abroad equivalent for French/Francophone literature courses. Enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**FRENCH 362 – STUDY ABROAD: FRENCH/FRANCOPHONE CIVILIZATION**

2-3 credits.

Used as a study abroad equivalent for French/Francophone civilization courses. Enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**FRENCH 391 – FRENCH FOR READING KNOWLEDGE**

3 credits.

Intensive grammar and reading for those with little or no experience in French. Readings from appropriate texts in the humanities, sciences, social sciences.

**Requisites:** Sophomore standing**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**FRENCH 420 – TOPICS IN FRENCH: STUDY ABROAD**

1-6 credits.

Used as a study abroad equivalent. Enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**FRENCH/ITALIAN/PORTUG/SPANISH 429 – INTRODUCTION TO THE ROMANCE LANGUAGES**

3 credits.

Introduction to structural similarities and differences apparent in major Romance languages (French, Italian, Portuguese, Spanish) and to their historical developments, with reference to basic linguistic features of each language: phonology, morphology, syntax, and lexicon.

**Requisites:** SPANISH 226, FRENCH 228, ITALIAN 311, or PORTUG 226**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**FRENCH 430 – READINGS IN MEDIEVAL AND RENAISSANCE LITERATURE**

3 credits.

Exploration of a thematic selection of texts from the Middle Ages and the Renaissance. Taught in French.

**Requisites:** FRENCH 321 or 322**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**FRENCH 431 – READINGS IN EARLY MODERN LITERATURE**

3 credits.

Exploration of a thematic selection of texts from the Early Modern period. Taught in French.

**Requisites:** FRENCH 321 or 322**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH/AFRICAN 440 – AFRICAN/FRANCOPHONE FILM**

3 credits.

Overview of cinematic works from francophone Africa and/or other areas of Africa. Teaches analysis and writing about cinema. Explores links between cinema and national or regional politics and ideology. Examines spectatorship in relation to questions of identity formation.

**Requisites:** Sophomore standing and 3 credits in AFRICAN, or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**FRENCH 449 – FRANCOPHONE MODERNITY STUDIES**

3 credits.

Topics in modern Francophone culture and literature with special emphasis on colonialism, slavery, diasporas, postcolonialism, and immigration. Taught in French.

**Requisites:** FRENCH 347 or 348**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**FRENCH 451 – MEDIEVAL, RENAISSANCE, AND EARLY MODERN STUDIES**

3 credits.

A thematic historical survey of culture in pre-Revolutionary (pre-1789) France. Taught in French.

**Requisites:** FRENCH 321 or 322**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017

### **FRENCH 461 – FRENCH/FRANCOPHONE LITERARY STUDIES ACROSS THE CENTURIES**

3 credits.

A study of how literature has evolved over the course of French history, in relation to a chosen topic. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **FRENCH 462 – FRENCH/FRANCOPHONE CULTURAL STUDIES ACROSS THE CENTURIES**

3 credits.

A study of how culture has evolved over the course of French history, in relation to a chosen topic. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **FRENCH 464 – LITERATURE AND MEDICINE IN FRENCH-SPEAKING CULTURES**

3 credits.

Choice of themes and periods studied will vary, and may range from historical surveys of the meanings of health and illness across the spectrum of French and Francophone cultures, to a close examination of texts or literary genres from a particular time that incorporate or respond to biomedical knowledge. Genre studied could include prose fiction, theater, creative non-fiction, film, comics, and works of medical popularization. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **FRENCH 465 – FRENCH/FRANCOPHONE FILM**

3 credits.

Representative French-language films will be studied from an esthetic and a cultural perspective. Choice of themes and periods studied will vary, and may range from historical surveys to a close examination of films from a particular time or place. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **FRENCH 467 – ASPECTS OF CONTEMPORARY FRENCH LITERATURE**

3 credits.

A study of the latest developments in contemporary French Literature. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### **FRENCH 472 – FRENCH/FRANCOPHONE LITERATURE AND WOMEN**

3 credits.

A study of literature by and/or about women, including theories of gender, in French and/or Francophone literary culture. Taught in French.

**Requisites:** FRENCH 321 or 322

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

### **FRENCH 567 – UNDERGRADUATE SEMINAR IN FRENCH/FRANCOPHONE LITERARY STUDIES**

3 credits.

Particular emphasis on discussion, research, and collective preparation of readings, on a topic within French and/or Francophone literary studies. Taught in French.

**Requisites:** One of: (FRENCH 430, 431, 449, 451, 461, 462, 464, 465, 467, or 472) or graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### **FRENCH 568 – UNDERGRADUATE SEMINAR IN FRENCH/FRANCOPHONE CULTURAL STUDIES**

3 credits.

Particular emphasis on discussion, research, and collective preparation of readings, on a topic within French and/or Francophone cultural studies. Taught in French.

**Requisites:** One of: (FRENCH 430, 431, 449, 451, 461, 462, 464, 465, 467, or 472) or graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**FRENCH 569 – CRITICAL APPROACHES TO LITERATURE AND CULTURE: FRENCH AND FRANCOPHONE PERSPECTIVES**

3 credits.

An introduction to theoretical and critical thinking about literary and visual texts, meant to accompany and supplement interpretative skills. Fundamental notions of rhetoric (principles of versification) and principles of narratology designed to improve the practice of close reading in poetry, drama, prose, and cinema across time periods. Taught in French.

**Requisites:** One of: (FRENCH 430, 431, 449, 451, 461, 462, 464, 465, 467, or 472) or graduate/professional standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**FRENCH 590 – INTRODUCTION TO PHONETICS**

3 credits.

Study of French sounds, phonetic transcription, practice in pronunciation. Taught in French.

**Requisites:** FRENCH 228 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**FRENCH 615 – ADVANCED GRAMMAR**

3 credits.

French grammar and style, with a special focus on various critical and professional applications. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**FRENCH 616 – SOCIAL RESPONSIBILITY IN CONTEMPORARY FRENCH-LANGUAGE PROFESSIONAL WRITING**

3 credits.

Investigates discourses of social responsibility in the French-speaking professional world and across sectors, in the fields of international development, marketing, management, and administration. By studying how concepts of socially responsible practice are represented in business and professional writing in France, Quebec and Francophone Africa, consider how trends in one's own concentration areas relate to those of classmates and future colleagues. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**FRENCH 617 – CONTEMPORARY SKILL SET LITERATURE IN FRENCH**

3 credits.

Examines how contemporary business and professional writing in French portrays professional skill sets for readers in Francophone Europe and North America, and to a lesser extent in Francophone Africa, particularly in the fields of international education, international development, marketing, management, and administration. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**FRENCH 618 – CAREER STRATEGIES FOR THE FRENCH-SPEAKING WORLD**

2 credits.

Study published contemporary French-language writing on career strategies for emerging professionals and professionals in transition in Europe, Africa and North America. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**FRENCH 623 – ORAL COMMUNICATION**

3 credits.

Professional communication for advanced speakers of French, with a particular focus on intercultural analysis, nonverbal communication, and public speaking. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2021

**FRENCH 626 – CRITICAL APPROACHES TO FRENCH LITERATURE**

3 credits.

Introduction to critical reading practices and theoretical principles behind them; textual analyses from various genres and periods. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015



**FRENCH 630 – THE AGE OF REASON**

3 credits.

Advanced study of 18th-century French literature and culture, in relation to a chosen topic. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FRENCH 631 – 17TH-CENTURY FRENCH LITERATURE**

3 credits.

Literary and philosophical trends of the Age of Enlightenment with special emphasis on Montesquieu, Voltaire, Diderot, and Rousseau. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**FRENCH 633 – THE 17TH-CENTURY NOVEL**

3 credits.

Advanced study of the novel as a genre in the 18th century. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**FRENCH 636 – THE FRENCH NOVEL: 1850-1900**

3 credits.

Study of novels by Fromentin, Flaubert, Zola, Maupassant, and Huysmans. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**FRENCH 637 – 19TH-CENTURY FRENCH LITERATURE**

3 credits.

Study of nineteenth-century literary texts in relation to their historical or cultural contexts or in light of new theoretical approaches. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**FRENCH 639 – 17TH-CENTURY LITERATURE**

3 credits.

Advanced study of important literary works of the 17th century. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**FRENCH 642 – CULTURE AND SOCIETIES**

3 credits.

Survey of major socio-political, cultural, and economic developments in the major French-speaking regions of the world, with a focus on Europe, Africa and Canada. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**FRENCH 645 – 16TH-CENTURY FRENCH LITERATURE**

3 credits.

Advanced study of important literary works of the 16th century. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**FRENCH 647 – THE 20TH-CENTURY FRENCH NOVEL**

3 credits.

Advanced study of important literary works of the 20th century. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FRENCH 653 – FRENCH AND FRANCOPHONE CINEMA**

3 credits.

The study of French and/or Francophone films in relation to their historical or cultural contexts through close readings and canonical theoretical approaches. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**FRENCH 665 – INTRODUCTION TO FRANCOPHONE STUDIES**

3 credits.

Study of literary texts from diverse Francophone cultures (Africa, the Caribbean, Quebec) and the cultural and political dynamics between these texts and these cultures. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**FRENCH 672 – TOPICS IN LITERATURE AND CULTURE**

3 credits.

Explores a specific topic in the history of French and/or Francophone literature and culture; includes analysis and interpretation of texts and/or film in their historical contexts. May be focused on one, or cut across different literary periods. Applies diverse interpretative methodologies to a coherent body of material. Taught in French.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**FRENCH 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**FRENCH 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**FRENCH 691 – THESIS**

2 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 1996

**FRENCH 692 – THESIS**

2 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 1997

**FRENCH 698 – DIRECTED STUDY**

1-6 credits.

Advanced independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**FRENCH 699 – DIRECTED STUDY**

1-6 credits.

Advanced independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**FRENCH/MEDIEVAL 701 – INTRODUCTION TO OLD FRENCH**

3 credits.

Introduction to Old French with an emphasis on reading. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**FRENCH/MEDIEVAL 704 – LA LITTERATURE FRANCAISE DU XIV ET DU XV SIECLE**

3 credits.

Study of important literary works of the 14th and 15th centuries. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**FRENCH/MEDIEVAL 705 – LA LITTERATURE FRANCAISE DES DEBUTS JUSQU A LA FIN DU XIII SIECLE**

3 credits.

Study of important medieval literary works up to the 13th century. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**FRENCH 750 – RESEARCH LABORATORY I: INTRODUCTION TO GRADUATE RESEARCH**

3 credits.

An introduction to graduate studies in French that provides the necessary skills for success. Includes exploration of structure and expectations of graduate programs, the basics of scholarly research, reflection upon research interests and possible individual scholarly identities, and academic conferences. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH 752 – RESEARCH LABORATORY II: PRODUCING PROFESSIONAL RESEARCH**

3 credits.

Provides the necessary skills for success in the PhD program. Includes exploration of structure and expectations, as well as of the professional skills needed to succeed in the profession after graduation. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**FRENCH 793 – PROFESSIONAL FRENCH MASTERS PROGRAM INTERNSHIP**

2-3 credits.

Professional internship abroad, in a French-speaking business or organization, in the student's professional field.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**FRENCH 799 – INDEPENDENT STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FRENCH/GERMAN/HISTORY/POLI SCI/SOC 804 – INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**FRENCH 820 – COLLEGE TEACHING OF FRENCH**

3 credits.

Introduction to teaching collegiate world languages with an emphasis on communicative and literacy-based pedagogical strategies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**FRENCH/ITALIAN 821 – ISSUES IN METHODS OF TEACHING FRENCH AND ITALIAN**

1-3 credits.

Intended for instructors of elementary- and intermediate-level collegiate instructors of Italian; key concepts of communicative, literacy-oriented language teaching and related techniques for classroom instruction of Italian.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FRENCH 825 – GRAMMAR AND STYLE**

3 credits.

Grammatical review and stylistic practice. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**FRENCH 901 – SEMINAR-MATERIALS AND METHODS OF RESEARCH**

1-3 credits.

Dissertation writing practicum.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**FRENCH 931 – SEMINAR-18TH CENTURY**

3 credits.

Study of important literary works of the 18th century. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**FRENCH 947 – SEMINAR: LITERATURE QUESTIONS**

3 credits.

Study of literature and culture organized thematically or by time period. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FRENCH 948 – SEMINAR: LITERATURE QUESTIONS**

3 credits.

Study of literature and culture organized thematically or by time period. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**FRENCH 951 – SEMINAR ON 19TH CENTURY FRENCH POETRY**

3 credits.

Study of 19th-century poetry. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**FRENCH 990 – INDIVIDUAL RESEARCH**

1-12 credits.

Mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## GENDER AND WOMENS STUDIES (GEN&WS)

**GEN&WS 100 – OPEN HOUSE GENDER LEARNING COMMUNITY SEMINAR**

1 credit.

This seminar is for residents of Open House Gender Learning Community. It addresses various topics of interest to this community.

**Requisites:** Member of Open House Gender Learning Community.**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS 101 – GENDER, WOMEN, AND CULTURAL REPRESENTATION**

3 credits.

A humanities-oriented analysis of cultural representations of women and men within the social and historical contexts of race, class, gender and sexuality; engages with a range of traditions and modes of representation including literature, mass media and popular culture.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GEN&WS 102 – GENDER, WOMEN, AND SOCIETY IN GLOBAL PERSPECTIVE**

3 credits.

Global, interdisciplinary, social science-oriented analysis of gender, race, class and sexuality in relationship to social institutions and movements for social change. Focus on gender and women in institutions such as education, the economy, the family, law, media, medicine, and politics.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 103 – GENDER, WOMEN, BODIES, AND HEALTH**

3 credits.

Examines both physiological and social processes relating to gender and health across the lifespan among cisgender, transgender, and non-binary individuals. Examples of topics include hormonal processes, reproductive anatomy physiology, sexuality, sexual pleasure, chronic illness, depression, and sexual violence. A primary course objective is for students to connect information about their bodies and personal health to larger social and political contexts. In particular, considers how health and health disparities are shaped by multiple kind of social inequalities, particularly inequalities based on gender.

**Requisites:** None**Course Designation:** Breadth – Natural Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 104 – GENDER, SEXUALITY, AND GLOBAL HEALTH**

3 credits.

Provides an introductory overview to critical global health studies, linking past trends to current research and health inequalities. Examines current trajectories in disaster relief and public health interventions through a gendered lens, with a solid grounding in the historical context. Explores social, demographic, political, economic, and ecological determinants of global health, and the ways that these factors interconnect with biomedicine to create and affect health outcomes, both within and across countries. Uses an intersectional approach to analyze how public health policies prioritize whose lives represent "save-able" or "salvageable" ones in the public, political, and corporate eye.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**GEN&WS 110 – FIRST YEAR TOPICS SEMINAR IN GENDER, WOMEN AND THE HUMANITIES**

3 credits.

An umbrella course used to offer a variety of special topics seminars for first year undergraduates. Courses using this number employ a humanities approach. The topic is footnoted whenever the course is offered.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**GEN&WS 120 – FIRST YEAR TOPICS SEMINAR IN GENDER, WOMEN AND SOCIETY**

3 credits.

An umbrella course used to offer a variety of special topics seminars for first year undergraduates. Courses using this number employ a social science approach. The topic is footnoted whenever the course is offered.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**GEN&WS/HISTORY 134 – WOMEN AND GENDER IN WORLD HISTORY**

3-4 credits.

A global (comparative and transnational) survey of women and gender from the ancient world to the modern period. Introduces students to key issues in the history of women and gender, including the historical construction of identities, roles, symbols, and power relationships.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/ENGL 144 – WOMEN'S WRITING**

3 credits.

An introduction to literature in English written by women in various periods and places; specific topics will vary.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**GEN&WS/SOC 200 – INTRODUCTION TO LESBIAN, GAY, BISEXUAL, TRANSGENDER AND QUEER+ STUDIES**

3-4 credits.

A multidisciplinary introduction to lesbian, gay, bisexual, transgender, and queer+ (LGBTQ+) studies, including theories of identity formation, different societal interaction with LGBTQ+ communities, LGBTQ+ cultures in history, and contemporary legal and political issues. Course materials explore the intersections between LGBTQ+ identities and other socially marginalized identities, including (but not limited to) those based on race, ethnicity, religion and disability.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS/LITTRANS 205 – WOMEN IN RUSSIAN LITERATURE IN TRANSLATION**

3-4 credits.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEN&WS/AFROAMER 221 – INTRODUCTION TO BLACK WOMEN'S STUDIES**

3 credits.

This course will provide students with an overview of the field of Black women's studies.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**GEN&WS/AFROAMER 222 – INTRODUCTION TO BLACK WOMEN WRITERS**

3 credits.

An introduction to the writings of Afro-American women from the nineteenth to the twentieth century. Fiction, autobiography, non-fiction prose, and poetry will be read and discussed.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 240 – FEMINIST APPROACH TO RESEARCH AND WRITING**

3 credits.

Experience the excitement and rewards of doing research in the field of Gender and Women's Studies via substantial instruction in the four modes of literacy (that is, speaking, reading, writing, and listening). Through engagement with primary sources, you will ask and define research questions, find and analyze evidence, assess and discuss scholarly interpretations of same sources, build a bibliography, and try out making an argument. Upon successful completion of this course, you will be prepared to undertake substantial research and writing in more advanced courses.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**GEN&WS/CHICLA/HISTORY 245 – CHICANA AND LATINA HISTORY**

3 credits.

Introduces the cultural, economic, social, and political history of Chicanas and Latinas in the U.S. and focuses on four major themes: contact between different ethnic/racial groups; ideas of nation and nationalism; constructions of identity; and struggles for social justice.

**Requisites:** None**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**GEN&WS/ENGL 248 – WOMEN IN ETHNIC AMERICAN LITERATURE**

3 credits.

American literature by and about women, written by authors from ethnic groups.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**GEN&WS/ENGL 250 – WOMEN IN LITERATURE**

3 credits.

Works by British and American writers, with emphasis on women writers of the twentieth century; close reading of texts and discussion of trends, themes, and special characteristics of the role of women in literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**GEN&WS/AFROAMER 267 – ARTISTIC/CULTURAL IMAGES OF BLACK WOMEN**

3 credits.

Cultural images by and about Black women; feminine creativity in the arts within their historical, cultural, social, and political contexts.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS/LITTRANS 270 – GERMAN WOMEN WRITERS IN TRANSLATION**

3 credits.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 280 – HONORS SEMINAR: STUDIES IN GENDER, SEX, AND SEXUALITY**

3 credits.

An intensive exploration in the topics and issues central to Gender and Women's Studies. Emphasis will be placed on critical thinking about gender through close readings of texts, classroom discussions, and informal and formal writing.

**Requisites:** Declared in an Honors program**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**GEN&WS 299 – DIRECTED STUDY**

1-3 credits.

For highly qualified and motivated students.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**GEN&WS/RELIG ST 305 – WOMEN, GENDER AND RELIGION**

3 credits.

Explores themes significant to the impact of religion on women and women on religion, historically and today, across a diverse range of contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/CHICLA/GEOG 308 – LATINX FEMINISMS: WOMEN'S LIVES, WORK, AND ACTIVISM**

3 credits.

An examination of Latinx women's lives, experiences, and activism through the lens of testimonio, life histories, and feminist writings rooted in social justice movements and critical pedagogies.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 310 – SPECIAL TOPICS IN GENDER, WOMEN AND THE HUMANITIES**

1-3 credits.

Investigation of some specific topic in gender and women's studies related to gender, women and the humanities.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018

**GEN&WS/HISTORY 315 – GENDER, RACE AND COLONIALISM**

3 credits.

Investigates how gender and race were socially constructed in cultural encounters between Europeans and "other" peoples in Africa, Asia, and the Americas.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEN&WS/COM ARTS 316 – GENDER AND COMMUNICATION**

3 credits.

Effective communication requires awareness of how gender influences communication and our capacity to build lasting and meaningful relationships. Learn about theories and concepts to understand how gender influences our interpersonal, professional, and social lives. Topics include terms and concepts relevant to the study of how we communicate about gender, sex and sexuality, including identity, language and nonverbal behavior, socialization, close personal relationships, education, work, violence, media and social movements.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GEN&WS 319 – STUDY ABROAD SPECIAL TOPIC: GENDER, WOMEN AND THE HUMANITIES**

3-4 credits.

Provides a gender and women's studies course equivalency for humanities courses taken in UW-Madison study abroad programs that do not equate exactly to an existing gender and women's studies course.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**GEN&WS 320 – SPECIAL TOPICS IN GENDER, WOMEN AND SOCIETY**

1-3 credits.

Investigation of some specific topic in gender and women's studies related to gender, women and society.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**GEN&WS/PSYCH 322 – SEXUAL & RELATIONSHIP VIOLENCE RESEARCH & ACTIVISM**

3 credits.

Examine sexual and relationship violence and how they intersect with various aspects of identity (race, gender, sexual orientation, disability, poverty, etc.) in the general community as well as within particular populations (college, military, incarcerated) with a heavy focus on college populations (some of the applied parts of the course will focus here). Learn about power and oppression, as well as ways that both research and practice in these arenas have been marginalized and underfunded. Additional focus on community and campus responses to sexual and relationship violence through a series of speakers as well as about anti-violence activism through course activities and group projects.

**Requisites:** Junior standing and 3 credits in PSYCH or GENWS

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GEN&WS/AFROAMER 323 – GENDER, RACE AND CLASS: WOMEN IN U.S. HISTORY**

3 credits.

Historical interplay of racism and sexism in the lives of Black and White women of different class backgrounds in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**GEN&WS/AFROAMER 324 – BLACK WOMEN IN AMERICA: RECONSTRUCTION TO THE PRESENT**

3 credits.

Explores African American women's experience from waning days of slavery to present. Topics include slavery, emancipation, reconstruction, segregation, migration, urban and rural poverty, civil rights, nationalism, feminism and sexual politics.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**GEN&WS/AFROAMER 326 – RACE AND GENDER IN POST-WORLD WAR II U.S. SOCIETY**

3 credits.

Assesses how race and gender (as well as socio-economic status, age, sexuality, region, etc.) shaped the experiences and options of African Americans, especially women, in U.S. society from WW II to the present.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 329 – STUDY ABROAD SPECIAL TOPIC: GENDER, WOMEN IN SOCIETY**

3-4 credits.

Provides a gender and women's studies course equivalency for social science courses taken in UW-Madison study abroad programs that do not equate exactly to an existing gender and women's studies course.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**GEN&WS 330 – TOPICS IN GENDER/CLASS/RACE/ETHNICITY (HUMANITIES)**

3 credits.

Topics in the feminist study of inequality and difference based on class, gender and race/ethnicity, with a humanities emphasis.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GEN&WS 331 – TOPICS IN GENDER/CLASS/RACE/ETHNICITY (SOCIAL SCIENCES)**

3 credits.

Topics in the feminist study of inequality and difference based on class, gender and race/ethnicity, with a social science emphasis.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS/CHICLA 332 – LATINAS: SELF IDENTITY AND SOCIAL CHANGE**

3 credits.

Explores the multiracial and multicultural reality of Latina societies by becoming familiar with the history and cultures of Chicana, Cuban-American, and Puerto Rican women. Interdisciplinary readings in law, journalism, public policy, history, and self-reflective literature.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/AFROAMER 333 – BLACK FEMINISMS**

3 credits.

Uses an interdisciplinary framework to interrogate core assumptions, arguments, and silences in past and present black feminist thought.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEN&WS 340 – TOPICS IN LGBTQ SEXUALITY**

3 credits.

Topics in feminist study of LGBTQ sexualities, considering race, nationality, and time.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**GEN&WS 342 – TRANSGENDER STUDIES**

3-4 credits.

Teaches students fluency with basic terms, concepts, and methodologies within the interdisciplinary field of Transgender Studies. Content includes transnational and cultural considerations; contemporary transgender issues in medicine, law, and education; cultural production, art and activism; transgender, feminist, and queer theories.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GEN&WS 343 – QUEER BODIES**

3 credits.

Centralizes the intersection of LGBTQ identities and dis/ability through various queer bodies which are also inflected by race, class, geographical and national locations. Approaches may include critical theory about queer bodies and personal narratives. Students will learn a variety of ways to think critically and creatively about the politics of bodily experience, including how those politics have shaped their own embodied lives.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 344 – BI/PAN/ASEXUALITY: COMMUNITY & REPRESENTATION**

3 credits.

Explore the experiences, needs, and goals of bisexual/biromantic, pansexual/panromantic, and asexual/aromantic (BPA) people, as well as their interactions with the mainstream lesbian gay community. Consider outcome disparities, community coalition building, and media representation. Explore how multiple marginalization within BPA communities may complicate analysis of members' experiences.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 345 – NARRATING QUEER LIVES**

3 credits.

Asks how LGBTI+ identity informs life experiences. Explores how LGBTI+ life experiences differ over time. Demonstrates the diversity of queer life stories. Examines the intersections of queer identity and other identity categories. Analyzes how religion, disability, race and class influence queer lives. Considers how and why queer memoirs share particular tropes. Investigates and employs oral history as a tool of preserving LGBTI+ life histories.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**GEN&WS/HISTORY 346 – TRANS/GENDER IN HISTORICAL PERSPECTIVE**

3-4 credits.

Focuses on sex/gender crossing and variation in historical contexts including Japan, South Africa, Europe, the African diaspora, and North America. Considers perspectives of people who themselves passed, crossed, transitioned, transed, or otherwise exceeded their culture's definitions of normative sex/gender. Alongside, consider the ways that dominant social institutions reinforced norms, recognized, tolerated, punished and/or celebrated gender variation. Examine popular culture, medical and legal perspectives, memoir, queer and trans theory, and social movement treatises.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**GEN&WS/ENGL 350 – SPECIAL TOPICS IN GENDER & LITERATURE**

3 credits.

Investigation of some specific topic in gender and women's studies related to gender and literature. Topic differs each semester.

**Requisites:** GEN&WS 101, 102, 103, or GENWS/SOC/GEN&WS 200**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS/CLASSICS 351 – WOMEN AND GENDER IN THE CLASSICAL WORLD**

3-4 credits.

Constructions of gender and sexuality in the classical world through art, literature and archaeology.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/HISTORY 353 – WOMEN AND GENDER IN THE U.S. TO 1870**

3-4 credits.

An advanced and comparative study of the roles of gender, class, and race in American history and historiography. Themes include women as agents of social change and as builders of community.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018

**GEN&WS/HISTORY 354 – WOMEN AND GENDER IN THE U.S. SINCE 1870**

3-4 credits.

See 520.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**GEN&WS/ENGL 359 – VISIONARY AND SPECULATIVE FICTION: SOCIAL JUSTICE APPROACHES**

3 credits.

Explores the genre of visionary fiction - speculative fiction written for social justice purposes - as a means to create, build and maintain new worlds. Examines the political potential of literature and multiple examples of visionary fiction.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/CLASSICS 361 – SEX AND POWER IN GREECE AND ROME**

3 credits.

Sex as a source of domination and liberation in Ancient Greek and Roman literature and modern European and North American theory and practice, including questions of sexual orientation, gender identity, violence, and self-realization.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEN&WS/AFROAMER 367 – ART AND VISUAL CULTURE: WOMEN OF THE AFRICAN DIASPORA AND AFRICA**

3 credits.

Art and visual culture by/or pertaining to women throughout the African Diaspora and Africa. Though the focus is on 10th century art by black women, it will go into visual culture (art objects, photographs, images, dress, culturally-coded representation) concerning black women historically.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**GEN&WS 370 – TOPICS IN GENDER AND DISABILITY**

3 credits.

Examines the social, cultural, political, and symbolic constructions of the intersecting categories of gender and disability.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**GEN&WS 371 – DISABILITY AND GENDER IN FILM**

3 credits.

Interdisciplinary analysis of the films about disability, stigmatized bodies, and their gendered constructions using feminist and disability studies methods.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**GEN&WS 372 – VISUALIZING BODIES**

3 credits.

Focuses on the intersections of the visual images of bodies, ethics, and politics from global and feminist perspectives. Students will learn critical approaches to visual media in feminist disability studies to analyze the images of bodies focusing on race, gender, disability, religion, sexuality, and other markers of difference.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015

**GEN&WS 373 – GENDER & THE CULTURAL POLITICS OF ILLNESS**  
3 credits.

Considers how illnesses exist not only as biomedical conditions but also as occasions for political activism, artistic creation, social change, and community formation. We will explore these issues in relationship to notable modern illnesses including AIDS, breast cancer, depression, multiple chemical sensitivities, and chronic fatigue syndrome. We will examine how illness intersects with embodied social identities such as gender, race, sexuality, dis/ability, ethnicity, class, and citizenship status. Course materials will include autobiographical and fictional writings, documentary and feature films, cultural and social theories, visual art, graphic novels, and digital media.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GEN&WS 374 – DISABILITY, GENDER AND SEXUALITY**  
3 credits.

Explores gender identity and sexuality among disabled people using historical and theoretical articles to discuss and analyze films, memoirs, and poetry by people with disabilities. Provides a brief introduction to disability studies and intersectionality before delving into academic discussions and artistic representations of the intersections of disability, gender, and sexuality.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN&WS/HISTORY 392 – WOMEN AND GENDER IN MODERN EUROPE**  
3-4 credits.

An examination of the cultural role of gender and the social, economic, and political activities of women in modern Europe from the 18th to the late 20th centuries.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS/ENGL 401 – RACE, SEX, AND TEXTS (HOW TO DO THINGS WITH WRITING)**  
3 credits.

Uses writing in many forms and genres to help students explore how race, gender, and sexuality intersect with language and inform textual experiences. From marriage licenses, passports, and don't ask, don't tell policies to literacy requirements and gag rules, written texts have played major roles in enforcing expectations about race and sex in the United States. At the same time, anti-slavery petitions, letters to the editor, wheat-pasted posters, and hashtag activism all also harness the power of writing to challenge and revise those expectations. In light of that active textual production and negotiation, this class traces public debates and daily experiences where people write or talk about race and sex in order to make a difference. Ultimately, the class takes on the power of words to break bones and heal wounds. Through reading and writing informed by scholarship in writing studies and rhetoric, students in this class will examine historical and contemporary interconnections among race, sexuality, gender, and texts in the United States, developing analytical tools for understanding how language works on and in their world.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN&WS 410 – SPECIAL TOPICS IN GENDER AND VISUAL CULTURE**  
3 credits.

Explores topics in gender and visual culture, including artistic practice, political and creative expression, and cultural phenomena. Course topic changes; may be repeated with a different topic.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022



### **GEN&WS 412 – CONTEMPORARY QUEER ART AND VISUAL CULTURE**

3 credits.

Queer art and visual culture are defined not only through their subject matter but also by the methods through which they appropriate and subvert conventional visual practices. Such tactics may include a work's means of production, its formal properties, and the conditions of its reception. The political imperatives of a queer or queered position, linked to the intersections of race, class, sex and gender will shape thematic investigations of practices related to activism, documentation, abstraction, mining the archive, craft, camp, and drag, among others. Case studies will be drawn from film, performance, comics, video games, and fine art. Projects will engage text- and studio-based research in an interdisciplinary push to integrate theory and practice. No prior art or design experience required.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS/THEATRE 415 – INTRODUCTION TO CONTEMPORARY FEMINIST THEATRE AND CRITICISM**

3 credits.

Introduction to the history, literature and theory of feminist theatre and of feminist criticism of mainstream theatre in the United States from 1960 to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS/COM ARTS 418 – GENDER, SEXUALITY, AND THE MEDIA**

3 credits.

Examines images of gender and sexuality in the media, with a focus on contemporary media in the U.S. Using theories from cultural studies, film and media studies, gender studies, and communication we will explore different processes and practices of gender and sexuality. Look at the way that gender and sexuality are constructed through social, cultural, and economic forces, and the way that these identities intersect with other social identities such as race, ethnicity, and class. Consider the way that media impact our understanding of feminism and post-feminism, violence, celebrity, consumer culture, subcultures and activism.

**Requisites:** GEN&WS 101, 102, 103, GENWS/SOC/GEN&WS 200, COMM ARTS 250 or graduate/professional standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **GEN&WS 420 – WOMEN IN CROSS-SOCIETAL PERSPECTIVE**

3 credits.

An interdisciplinary examination of the position of women in a variety of social contexts; an analysis of the society--specific and universal social forces that determine the position of women; an investigation of the change in women's status and role worldwide and an inquiry into the causes of this change.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **GEN&WS/LEGAL ST 422 – WOMEN AND THE LAW**

3 credits.

Legal system, laws, and proposed legislation that have specific impact on the lives of women. Topics investigated in both the social and legal contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **GEN&WS 423 – THE FEMALE BODY IN THE WORLD: GENDER AND CONTEMPORARY BODY POLITICS IN CROSS CULTURAL PERSPECTIVE**

3 credits.

Explores the social, cultural, and political construction of the female/feminine body. Considers specifically the bodies of women and girls, transgender women, non-binary people that embody the feminine, female masculinities, and bodies that identify and are identified as female, as bodies that have historically and traditionally been sites of political contention, of societal meaning making, of cultural symbolism, and active resistance. Seeks to challenge what we think we know about bodies, challenging tacit knowledge and investigating how normative discourses of the female/feminine body are formed across cultures, around the world. Considers the impacts of phenomena such as globalization, neoliberalism, "global" feminism, imperialism, capitalism, and human rights movements on cultural conceptions of health, ability, beauty, representation, and the "value" of female/feminine bodies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 424 – WOMEN'S INTERNATIONAL HUMAN RIGHTS**

3 credits.

An examination of the contemporary development of international human rights and women's rights, and the fundamental contradiction between them. Analyzes core themes and issues of women's international human rights.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**GEN&WS/LEGAL ST/SOC 425 – CRIME, GENDER AND JUSTICE**

3 credits.

Focuses on the intersection between gender, crime and justice from a cross-cultural perspective. The gendered nature of the criminal justice system, female experiences of crime, prosecution and incarceration as well as the extent to which women are victims, offenders, and participants in the criminal justice system will be explored. Special emphasis will be placed on the theoretical implications of offending behavior and the intersection of gender with sexuality, race, ethnicity and class. The goal of this course is to provide a foundation for critically assessing the often controversial issues surrounding race, gender, crime, and criminal justice in society.

**Requisites:** LEGAL ST/SOC/LEGAL ST 131, GENSWS 101, 102, 103 or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 427 – GLOBAL FEMINISMS**

3 credits.

Explores feminism and gender across cultural contexts with emphasis on the Global South. Includes theories for the study of women and gender in foreign contexts, comparison of gender relations and feminisms across countries, and analysis of national and transnational feminist organizing.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**GEN&WS/FOLKLORE 428 – GENDER AND EXPRESSIVE CULTURE**

3 credits.

Examines the relationship between dominant images of gender representation as they emerge in expressive culture in various societies.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**GEN&WS/POLI SCI 429 – GENDER AND POLITICS IN COMPARATIVE PERSPECTIVE**

3-4 credits.

Examines the gendered nature of political institutions around the world, including implications of women's exclusions from public life in a global context; the obstacles to women's greater participation; how women have gained greater voice in political leadership in some countries; and the differences women make in the political arena. Not open to students with credit for POLI SCI 643 prior to fall 2017

**Requisites:** Sophomore standing; not open to special students**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS/POLI SCI 435 – POLITICS OF GENDER AND WOMEN'S RIGHTS IN THE MIDDLE EAST**

3 credits.

Explores the intertwined relationship between gender and politics in contemporary Middle East and North Africa. Situates the region's historical, socio-political, and cultural context that have particularly contributed to shaping the current discourse on gender in the Arab World. Explores - both theoretically and empirically - the role of Arab women in influencing the political processes across the Middle East. Examines real-world examples of Middle Eastern women from different parts of the region who have succeeded to challenge the status quo and push for genuine change.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEN&WS/AMER IND/ANTHRO/FOLKLORE 437 – AMERICAN INDIAN WOMEN**

3 credits.

Examines and interprets the roles of American Indian women in traditional societies, and in contemporary North America.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GEN&WS/LITTRANS/SCAND ST 438 – SEXUAL POLITICS IN SCANDINAVIA**

3 credits.

Read and discuss works by Scandinavian writers of the nineteenth and twentieth century reflecting sexual politics and the roles of women in literature. Course taught in English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEN&WS 441 – CONTEMPORARY FEMINIST THEORIES**

3 credits.

Contemporary theoretical positions and debates about feminisms in the humanities and social sciences.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**GEN&WS/ANTHRO 443 – ANTHROPOLOGY BY WOMEN**

3 credits.

Contributions of women anthropologists to feminist and anthropological theories and research methods. Field research and gender. Current debates in women's studies and anthropology in light of recent research on women and gender in cross-cultural perspective.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 445 – THE BODY IN THEORY**

3 credits.

Explores a broad range of contemporary theories concerned with bodies and power. Intersections with gender, race, class, dis / ability, sexuality and nation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**GEN&WS 446 – QUEER OF COLOR CRITIQUE**

3 credits.

An examination of the emergent theoretical field of queer of color critique, a mode of analysis grounded in the struggles and world-making of LGBTQ people of color. Activists, artists, and theorists have mobilized queer of color critique to interrogate the intersections of race, gender, sexuality, class, nation, and diaspora as a response to the inherent whiteness of mainstream queer theory and persistent heterosexism in ethnic studies. Examines the development of queer of color critique (primarily in the United States) through both academic and activist domains; consider what queer theory has to say about empire, citizenship, prisons, welfare, neoliberalism, and terrorism; and articulate the role of queer of color analysis in a vision for racial, gender, sexual, and economic justice.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 449 – SPECIAL TOPICS IN FEMINIST THEORY**

3 credits.

Investigation of specific theorists, themes, problems, or eras in feminist social and cultural theory. Course topic differs each semester. Course may be repeated with different topics.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEN&WS/PORTUG 450 – BRAZILLIAN WOMEN WRITERS**

3 credits.

A survey of representative writing by contemporary Brazilian women writers in relation to representations of nationality, race, class, ethnicity, gender and sexualities.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEN&WS/PORTUG 460 – CARMEN MIRANDA**

3 credits.

Examines the work, representation and interpretation of Carmen Miranda from her early days as a radio star in Brazil to a film actress and entertainer in Hollywood in the 1940s and 50s.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**GEN&WS/ASIAN AM/ENGL 463 – RACE AND SEXUALITY IN AMERICAN LITERATURE**

3 credits.

Explores the intersection between race and sexuality in American literature with an emphasis on sex/gender difference, feminism, transgenderism, and nationalism. Focuses on the nature of literature as advocacy, with an emphasis on Asian-American issues.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEN&WS/ASIAN AM/ENGL 464 – ASIAN AMERICAN WOMEN WRITERS**

3 credits.

Major texts by Asian American women writers.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GEN&WS/FOLKLORE 467 – WOMEN AND POLITICS IN POPULAR CULTURE AND FOLKLORE**

3 credits.

How popular culture and folklore have been used by women as rhetorical tools that promote deliberation and debate, broaden political engagement, and advance particular social identities. Global content, with examples from around the world.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**GEN&WS/FOLKLORE 468 – FEMINISM, FOLKLORE AND COMPARATIVE LITERATURE**

3 credits.

Explores feminism, folklore and comparative literature from a variety of perspectives drawing from scholarship in feminist philosophy, folklore, anthropology, critical cultural studies, and postcolonial theory.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**GEN&WS/POLI SCI 469 – WOMEN AND POLITICS**

3-4 credits.

Changing political roles, status, attitudes, and behaviors of women in contemporary society and of the political implications of changing female/male relationships.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEN&WS/GEOG 504 – FEMINIST GEOGRAPHY: THEORETICAL APPROACHES**

3 credits.

Provides an opening to some of the key debates and practices in feminist (political) geography. Feminist geography focuses on questions of power, difference, embodiment, and social change. How are feminist geographies in conversation with or part of other fields of inquiry, such as critical ethnic studies and Indigenous studies, which also focus on questions of difference, epistemologies of knowledge, and social transformation and/or decolonization? That is, what are the relationships of feminist geographic inquiry to liberatory projects of ending racism, capitalism, settler colonialism, and heteropatriarchy. Explore how feminist theories and approaches in geography transformed prevailing political geographic questions and concerns, such as power, politics, territory, boundaries, sovereignty, and violence. What do feminist principles and debates over feminist politics and methods bring to (political) geography?

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **GEN&WS/GEOG 514 – FEMINIST GEOGRAPHY: METHODOLOGICAL APPROACHES**

3 credits.

An introduction to foundational approaches to feminist qualitative research in human geography. Research is not separate from a social world that historically has been and continues to be shaped by (settler) colonial, racialized, gendered, sexualized, and class-inflected relations of power (among others). Research practices and "findings" have been and continue to be used to inform and rationalize relations of oppression, exploitation, and violence. For feminist researchers, then, questions of power, difference, and social change are central to how we design and conduct research. Engages in political-ethical discussions about the positionality and responsibilities of ourselves as researchers, and how our knowledge production can reproduce and challenge prevailing relations of power.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **GEN&WS/HISTORY 519 – SEXUALITY, MODERNITY AND SOCIAL CHANGE**

3 credits.

A history of sexuality approach to a period of major social, economic, and political change in US history, 1880-1930; medical, legal, and popular discourses shaping urbanization, reform, nationalism and colonialism.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **GEN&WS/PSYCH 522 – PSYCHOLOGY OF WOMEN AND GENDER**

3 credits.

Examination of theories and research on the psychology of women and gender. Explores topics such as sex bias in psychological research; psychological aspects of female sexuality and reproduction; gender-based violence; female achievement and power; lifestyle choices of women; women and mental health; and psychological research with transgender individuals.

**Requisites:** Sophomore standing, a course in PSYCH and (GEN&WS 102 or 103) or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS 523 – FRAMING FATNESS: GENDER, SIZE, CONSTRUCTING HEALTH**

3 credits.

Explores various aspects of identity politics and body politics such as gender, race, ethnicity, sexuality, ability, and citizenship status as they relate to and intersect with body size and constructions of fatness. Situates how fatness has been conceptualized over time, the formation of the gendered body ideals, and the proliferation of obesity rhetoric. Investigates how fat individuals experience the social world, in particular related to arenas such as the American health care system, and other societal institutions such as education, social welfare, immigration, and media. Interrogates how the "obesity epidemic" came to be, how it is framed in the United States, and how it intersects with other systems like big pharma, the food industry, beauty industry, globalization, neoliberalism, and consumerism. Deploys a critical approach in understanding fatness and body size as dimensions of difference that inform experiences of privilege and oppression.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS 524 – RACE, GENDER, HEALTH, AND MEDICINE**

3 credits.

Uses race and gender theoretical frameworks to understand peoples' experiences with health and medicine. Conceptualizes race and gender as social categories and applies these frameworks to how people experience health, wellness, and disease. Examines how healthcare and medicine are structured according to racialized and gendered frameworks. Surveys a wide range of issues including reproductive health, body size, mental health, COVID, among other topics. Uses an intersectional approach to analyzing key debates in scholarship on health and medicine.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GEN&WS 525 – GENDER AND GLOBAL HEALTH IN CRITICAL PERSPECTIVE**

3 credits.

Examines the contemporary global health project in historical and cultural context, highlighting some of the greatest sources of tension and struggle. Using a feminist lens and focusing on gender as key analytic category, explores the ways that the distribution of global wealth and power impacts health and well-being around the world. Explores social, demographic, political and economic determinants of global health, and the ways that these factors interconnect with biomedicine to create and affect health outcomes, both within and across countries. Drawing on critical theories, situates the study and practice of global health in an intersectional framework.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**GEN&WS 527 – THE ENVIRONMENT OF THE WOMB: EPIGENETICS AND PARENT/CHILD HEALTH**

3 credits.

Concentrating social and ecological environments as well as that of the body, focuses on the toxic effects of late industrialism, epigenetics and maternal/fetal health as well as destabilizing ideas about "normal" reproduction. Examine how the possibilities for expanding the scope from maternal/fetal health to "parent/child" health - where kinship is not strictly about biologic belonging or coming "straight from the womb," but also about love and a safe home or chosen family. Undergirding our analysis is an "eco-social" approach, guided by questions of what constitutes "health," access to living a healthy life - in a body and on a planet that feels safe to inhabit.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**GEN&WS 530 – BIOLOGY AND GENDER**

3 credits.

Examines the theories and methodologies of the relevant research areas in biology and animal behavior that underlie biological determinist theories of gender and gender differences, and explores alternative approaches, theoretical constructs and interpretations.

**Requisites:** Junior standing or GEN&WS 103**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEN&WS/HIST SCI/MED HIST 531 – WOMEN AND HEALTH IN AMERICAN HISTORY**

3 credits.

Women as patients and as health professionals in America from the colonial period to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**GEN&WS/HIST SCI/MED HIST 532 – THE HISTORY OF THE (AMERICAN) BODY**

3 credits.

This course demonstrates that human bodies have social and cultural histories. It will highlight the social values placed on different bodies, the changing social expectations bodies create, and the role of science and medicine in creating the cultural meanings of bodies.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 533 – SPECIAL TOPICS IN GENDER AND BIOLOGY**

3 credits.

Examination in depth of specific topics in the area of gender and biology. Critical feminist reading of scientific literature and exploration of relevant biomedical issues in social and cultural contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



### **GEN&WS 534 – GENDER, SEXUALITY, AND REPRODUCTION: PUBLIC HEALTH PERSPECTIVES**

3 credits.

Explores several theoretical lenses, disciplinary approaches, and substantive topical areas relating to reproductive and sexual health. Begin by investigating the development of "sexual health" as a phenomenon in public health research, policy, and programs looking back to feminist responses to population control policies of the 1970s. Covers substantive topical areas in the field (e.g., adolescent sexual development, contraception, and AIDS).

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS/INTL ST 535 – WOMEN'S GLOBAL HEALTH AND HUMAN RIGHTS**

3 credits.

A human rights approach to global women's health to provide an overview of health issues within the context of a woman's life cycle. It will pay special attention to the socio-cultural and economic factors that play a role in determining women's access to quality basic health care.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEN&WS 536 – QUEERING SEXUALITY EDUCATION**

3 credits.

Situates sexual health education in historical and contemporary context by tracing its discursive production and envisioning a queering of both content and practice. An examination of what might it mean to queer sex education and what would a queer sex education look like. Utilizing theoretical interventions from critical education studies, queer theory, and trans/gender studies, this course.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **GEN&WS/HIST SCI 537 – CHILDBIRTH IN THE UNITED STATES**

3 credits.

Using a reproductive justice framework, analyze contexts, experiences, practices, ideologies, and historiographies of childbirth in the United States from roughly the 17th century to the present, with the heaviest emphasis on the 20th and 21st century. Examines the ways that colonization, genocide, enslavement, racism, capitalism, heterosexism, patriarchy, and ableism have shaped all of these aspects of childbirth. Inquire how key movements and groups resisting some of these forms of oppression have had the power to reshape birth, as well as locating in birth a source of transformational power.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **GEN&WS 538 – SPECIAL TOPICS IN LGBTQ+ HEALTH**

3 credits.

Examination in depth of specific topics in the area of LGBTQ+ health. Critical reading of evidence-based literature and exploration of relevant health and biomedical LGBTQ+ issues in biological, social, economic and cultural contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

### **GEN&WS 539 – SPECIAL TOPICS IN GENDER AND HEALTH**

3 credits.

Examination in depth of specific topics in the area of gender and health. Exploration of relevant health issues in social, economic, and cultural contexts, including public health and policy, and how they relate to gender, race, sexuality, disability, and class.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **GEN&WS/ENGL 545 – FEMINIST THEORY AND WOMEN'S WRITING IN ENGLISH**

3 credits.

Feminist theory and women's writing in English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**GEN&WS 546 – FEMINIST THEORIES AND MASCULINITIES**

3 credits.

Explores central assumptions, questions, and debates regarding the relationship between feminist theory, pro-feminist theory, and the practice and performance of multiple masculinities. Explores feminist-informed definitions of and debates about masculinity including whether masculinity is primarily a gender-role and/or a form of sexual expression. Further, key tensions related to men's status, or their lack thereof, as subjects of feminist theory will be examined. Examine the practice and performance of specific masculinities including but not limited to African American masculinities, trans masculinities, and faith-informed masculinities.

**Requisites:** AFROAMER/GEN&WS/AFROAMER 333, GEN&WS 441, 445, 446, 449, or 547; or graduate/professional standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEN&WS 547 – THEORIZING INTERSECTIONALITY**

3 credits.

Critically examines important issues, questions, and debates regarding intersectionality or the notion that race, gender, and sexuality, and other terrains of difference gain meaning from each other. Materials include texts, films, and other multimedia resources drawn from an array of disciplines including sociology, critical race theory, history, political theory, and cultural studies.

**Requisites:** AFROAMER/GENWS 333, 441, 445, 446, 449, 546 or graduate/professional standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS/ED POL 560 – GENDER AND EDUCATION**

3 credits.

Examines the relationship between gender and education and explores notions of gender as socially constructed categories and identities. Identify the ways schools (re)produce and mediate gender identities and explore the experiences of students. Draws on critical and feminist perspectives to analyze the ways gender intersects with understandings of identity performance and expression such as masculinity and femininity, as well as at the intersection of race, ethnicity, class, and sexuality in schooling processes.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS/SOC 611 – GENDER, SCIENCE AND TECHNOLOGY**

3 credits.

Examination of issues and theories in gender and science. Topics include historical and contemporary studies of technoscientific and medical constructions of sex/gender differences; feminist studies of science, technology, and medicine; proposals of new epistemologies.

**Requisites:** Junior standing and SOC/C&E SOC 475, GEN&WS 441, GEN&WS 445, or SOC/GENWS 477 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**GEN&WS/AFROAMER 624 – AFRICAN AMERICAN WOMEN'S ACTIVISM (19TH & 20TH CENTURIES)**

3 credits.

Examines Black women's struggles for racial justices; reconsiders conventional notions of leadership, politics and protest. Topics include abolitionism, anti-lynching campaigns, woman suffrage, labor movement, club movement, cultural expressions, civil rights protest, Black feminism/womanism, poverty and welfare rights, environmental racism, etc.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN&WS/AFROAMER 625 – GENDER, RACE AND THE CIVIL RIGHTS MOVEMENT**

3 credits.

This course focuses on the emerging field of gender studies in the scholarship on the post-World War II civil rights movement in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 640 – CAPSTONE SEMINAR IN GENDER AND WOMEN'S STUDIES**

3 credits.

This capstone synthesizing seminar for Gender and Women's Studies majors focuses on the major contributions of gender and women's studies scholarship, requires students to hone their interdisciplinary skills, and apply their feminist theory knowledge. It is expected that students have completed more than 50% of their GENWS coursework before enrolling. Process for enrollment permission will be shared by GWS advisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 642 – ADVANCED SEMINAR IN LGBT STUDIES (LGBT STUDIES CAPSTONE)**

3 credits.

Capstone for LGBTQ+ Studies certificate; culminates certificate work through advanced interdisciplinary readings, analysis and discussion in LGBTQ+ Studies and completion of a research project. It is expected that students have completed more than 50% of their LGBTQ+ Studies coursework before enrolling. Process for enrollment permission will be shared by LGBTQ+ Studies advisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**GEN&WS/URB R PL 644 – INTERNATIONAL DEVELOPMENT AND GENDER**

3 credits.

In addition to reviewing gender-within-development theory and practice, this course examines specific gender issues including social status and roles, productive and reproductive work, access to resources, identity and citizenship, empowerment, and intersection of race, class, and ethnicity with gender.

**Requisites:** None**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**GEN&WS 660 – INTERNSHIP IN GENDER AND WOMEN'S STUDIES**

3 credits.

Opportunities for learning and working in organizations in ways that connect coursework in gender and women's studies to specific and applied issues in community settings. Permission to enroll is granted from the instructor after an application process is completed the semester before the course is taught.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS/AFROAMER 677 – CRITICAL AND THEORETICAL PERSPECTIVES IN BLACK WOMEN'S WRITINGS**

3 credits.

Analyses and interpretations of literary works by black women writers through historical, philosophical, political, feminist, and other contemporary critical methods.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS/AFROAMER 679 – VISUAL CULTURE, GENDER AND CRITICAL RACE THEORY**

3 credits.

Examines tensions between visual and verbal representations that variably construct and negotiate power relations in racialized human experience.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**GEN&WS 681 – SENIOR HONORS THESIS I**

3 credits.

Research and preparation for completing the senior honors capstone experience carried out under the supervision of an advisor in the women's studies program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN&WS 682 – SENIOR HONORS THESIS II**

3 credits.

Completion of the senior honors capstone project begun in Gender and Women's Studies 681 carried out under the supervision of an advisor in the women's studies program.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 691 – SENIOR THESIS I**

2-3 credits.

Research and preparation for the writing of a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 692 – SENIOR THESIS II**

2-3 credits.

Senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GEN&WS 699 – DIRECTED STUDY**

1-6 credits.

Graded on lettered basis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS 720 – SPECIAL TOPICS IN GENDER AND WOMEN'S STUDIES**

1-3 credits.

Advanced level investigation of some specific topic in gender and women's studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS/ENGL 737 – FEMINIST THEORY AND CRITICISM**

3 credits.

Feminist theory, with an emphasis on literary and cultural theory and criticism in English.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**GEN&WS/CURRIC 760 – SEX/GENDER-RELATED ISSUES IN CURRICULUM AND INSTRUCTION**

3 credits.

A poststructural feminist analysis of educational discourse and practice; examines selected sex/gender issues in curriculum and instruction; explores some implications for classroom teaching of the complex interrelationships between sex/gender, race, social class, sexuality, and ability/disability.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN&WS 790 – RESEARCH & THESIS: MASTER'S AND PROFESSIONAL LEVEL**

1-6 credits.

Research and thesis writing for students at the Master's and professional level.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS 799 – INDEPENDENT RESEARCH AT THE MASTER'S AND PROFESSIONAL LEVEL**

1-3 credits.

Independent research for master's or professional level graduate students.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS 800 – RESEARCH METHODS IN GENDER & WOMEN'S STUDIES**

3 credits.

Explores feminist approaches to methods in the social sciences, humanities, and health sciences, such as ethnography, interviews, statistics, focus groups, surveys, archival research, discourse analysis, and visual analysis. Applies transdisciplinary perspectives to consider work from a range of academic fields and topics in order to critique issues of epistemology, methodology, methods, interpretation, and writing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEN&WS/ED POL/PUB AFFR 805 – GENDER ISSUES IN INTERNATIONAL EDUCATIONAL POLICY**

3 credits.

Exploration and analysis of recent debates related to gender issues in international educational policy, including the intersection of education and demographic processes, the play of history and culture, and the social construction of gender.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**GEN&WS 810 – GENDER AND WOMEN'S STUDIES: THE EMERGENCE AND TRANSFORMATION OF A FIELD**

3 credits.

Provides an overview of the field of gender and women's studies. Surveys the origin of the field and traces its major transformations. Explores and analyzes historical and contemporary debates that have shaped and continue to shape the field. Interrogates the mission of gender and women's studies. Examines the processes and products of academic professionalization. Investigates the value of graduate training in gender and women's studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

**GEN&WS/JOURN 828 – GENDER AND SEXUALITY IN MASS COMMUNICATION**

3 credits.

A scholarly theory overview on gender and sexuality in communication studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 830 – CONTEMPORARY THEORIZING IN GENDER AND WOMEN'S STUDIES**

3 credits.

Examines assumptions and debates in contemporary theorizing about gender and women including what constitutes "good" gender and women studies' theorizing, how to recognize gender-based oppression when we see it, how gender, race, sexuality, and other hierarchies of power intersect, as well as the merits of transnational theorizing about gender and women. Explores whether gender and women's studies' theorizing is a form of activism, how to teach theory in gender and women's studies' classrooms, the value of cultivating distinct gender and women studies' methods, and other dimensions of putting gender and women's studies' theorizing into practice.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEN&WS 840 – PEDAGOGY IN GENDER AND WOMEN'S STUDIES**

3 credits.

Provides an introduction to feminist pedagogy in Gender and Women's Studies, Focuses upon: (1) the historical importance of an explicit feminist pedagogy in the foundation of GWS, (2) the development of feminist pedagogical theory and (3) a hands-on experience with developing feminist pedagogical materials, classroom strategies and a teaching portfolio. Considers the ways that feminist pedagogical approaches reconsider and challenge aspects of traditional pedagogical practices and training. Engages the development of feminist pedagogical thought and interrogates the different intellectual traditions that have shaped debates and issues within feminist politics and practices.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN&WS 860 – PROSEMINAR IN GENDER AND WOMEN'S STUDIES**

1 credit.

Provides an orientation to basic features of scholarly life as well as some professional options outside of academia, and become acquainted with our faculty and their research. Explores issues both broad (e.g., professional development) and specific (e.g., obtaining research grants) that are important to those building professional careers with a Gender and Women's Studies Ph.D.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN&WS 880 – PROSEMINAR: GRADUATE STUDY IN GENDER AND WOMEN'S STUDIES**

3 credits.

Introduces new graduate students to the breadth of scholarship in Gender and Women's Studies. It also develops particular skills (critical reading, critical writing and basic research) important to graduate level scholarship.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN&WS/C&E SOC/SOC 904 – SOCIOLOGICAL PERSPECTIVES ON GENDER**

3 credits.

Advanced topics in the analysis of gender relations in society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEN&WS/ANTHRO 920 – ANTHROPOLOGY OF GENDER**

3 credits.

Theoretical and ethnographic approaches to the anthropology of gender, focusing on current works. Topics include sexual inequality, research methods, gender and history, gender and ethnographic writing, cultural constructions of masculinity, sexuality, and gender studies and anthropological theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021



**GEN&WS/PSYCH 932 – PSYCHOLOGY OF WOMEN AND GENDER**  
3 credits.

Examines research and theory in psychology of women and gender. Topics include feminist approaches to research methods, psychological gender differences and similarities, women of color, mental health and feminist therapy, rape, sexual harassment, transgender issues and research, and public policy issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS/POLI SCI 933 – FEMINIST POLITICAL THEORY**  
3 credits.

Focuses on how specific schools of feminist thought redefine the political, spanning historical and contemporary feminist political theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEN&WS/HISTORY 938 – HISTORY OF SEXUALITY**  
3 credits.

Using sexuality as a category of historical analysis, examines historiographical, methodological, and theoretical contributions to understanding all aspects of the past.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN&WS 950 – SEMINAR: TOPICS IN GENDER AND WOMEN'S STUDIES**  
3 credits.

Research seminar on specific topics in gender and women's studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**GEN&WS 990 – RESEARCH & THESIS**  
1-6 credits.

Independent research and writing to complete dissertation requirement

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**GEN&WS 999 – INDEPENDENT RESEARCH**  
1-3 credits.

Directed study projects for graduate students as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## GENERAL BUSINESS (GEN BUS)

**GEN BUS 106 – FOUNDATIONAL SKILLS FOR BUSINESS ANALYSIS**  
1 credit.

Build fundamental skills and processes to develop a strong foundation in business analysis utilizing Excel. Learn the fundamentals of data construction, manipulation, summarization, analysis and presentation.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 110 – PERSONAL AND PROFESSIONAL FOUNDATIONS IN BUSINESS**  
1 credit.

An introduction for new business students covering academic exploration and planning, career development, self-assessment for personal development, leadership, and diversity and inclusion.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 120 – PERSONAL AND PROFESSIONAL FOUNDATIONS IN BUSINESS**  
1 credit.

An introduction to academic exploration and planning, career development, self assessment for personal development, leadership, and diversity and inclusion.

**Requisites:** Sophomore standing and (MATH 211, 217, or 221)

and (ECON 101 or 111) and (PSYCH 201, 202, or 281) and satisfied Communications A requirement. Not open to students with credit for GEN BUS 110.

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GEN BUS 198 – DIRECTED STUDY**  
1 credit.

Directed study and research in business topics.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2008



**GEN BUS 206 – BEGINNING DATA ANALYSIS FOR BUSINESS**

3 credits.

Learn basic business statistical skills to comprehend business reports, and to calculate statistical findings from business data using Excel. Understand simple probability calculations and how to apply probability to specific business uncertainties. Build capability to use simple statistical models and tests to estimate business variables of interest, and learn about predictive relationships between variables. Become comfortable using Excel for data manipulation, data analytics, and data visualization. Apply statistical analysis to address business issues.

**Requisites:** MATH 112 and GEN BUS 106**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 207 – INTERMEDIATE DATA ANALYSIS FOR BUSINESS**

3 credits.

Enables you to understand and apply useful approaches to analyzing and presenting data to support business decision making. Emphasis on applications of predictive and prescriptive analytics. Predictive approaches use historical data to infer relationships and forecast future outcomes. Prescriptive methods formulate decision models to identify choices that are optimal with respect to a desired, measurable outcome. Provides experience integrating diverse data sources, modelling uncertainty, and visualizing key insights.

**Requisites:** GEN BUS 206**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 301 – BUSINESS LAW**

3 credits.

History of legal development, contracts, agency, sale of goods, insurance.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 302 – BUSINESS ORGANIZATIONS AND NEGOTIABLE INSTRUMENTS**

3 credits.

Commercial paper, real estate and personal property, partnerships, corporations, bankruptcy.

**Requisites:** Junior standing and GEN BUS 301**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 306 – BUSINESS ANALYTICS I**

3 credits.

Development of quantitative intuition through practical applications and use of analysis tools. Specifically, emphasis will be on how to manage, summarize, explore, and visualize databases. The essentials of probability will be introduced and applied to decision problems where there is uncertainty. Emphasis on hypothesis testing and regression analysis and include an introduction to simulation methods. Throughout, attention will be paid to effective communication of data analysis. The use of business cases will connect the course material to both real world settings and recent advances in data analysis, including big data and data mining.

**Requisites:** (GEN BUS 106 or concurrent enrollment) and (MATH 211, 217, 221 or 275), or declared in undergraduate Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 307 – BUSINESS ANALYTICS II**

3 credits.

Emphasis on hands-on experience with many commonly used analytic methodologies using the modeling and optimization tools available on almost every professional desktop. The focus is predictive and prescriptive analytics. Predictive approaches use historical data to infer causal relationships and forecast future outcomes from a given action. Prescriptive methods take this a step further, helping managers formulate decision models that identify optimal actions given a set of circumstances.

**Requisites:** GEN BUS 106 and 306, or declared in undergraduate Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 310 – FUNDAMENTALS OF ACCOUNTING AND FINANCE FOR NON-BUSINESS MAJORS**

3 credits.

Part of a two course sequence introducing non-business students to basic concepts, practices and analytical methods that are part of the market enterprise system. This course is a basic overview on: accounting, finance, and business law.

**Requisites:** Sophomore standing or declared in the Business Exchange program**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEN BUS 311 – FUNDAMENTALS OF MANAGEMENT AND MARKETING FOR NON-BUSINESS MAJORS**

3 credits.

Introduces non-business students to basic concepts and practices in business. This course is a basic overview of: management, marketing, strategy, entrepreneurship, ethics, supply chain and international business.

**Requisites:** Sophomore standing. Not open to students declared in a School of Business program**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GEN BUS/INTL BUS 320 – INTERCULTURAL COMMUNICATION IN BUSINESS**

3 credits.

Develops awareness and knowledge of cultural influences on business. Focuses on various attitudes toward work, time, material possession, business, and the relationship of these attitudes to different social, religious, philosophical, and educational backgrounds of business people from cultures around the world.

**Requisites:** Sophomore standing or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 360 – WORKPLACE WRITING AND COMMUNICATION**

3 credits.

Develop and practice workplace communication skills: writing, speaking, and listening. A theoretical foundation provides a method of deep audience analysis; apply that analysis when producing a variety of written genres and when preparing content for formal presentations. Research communication and information sources specific to future careers. Strengthen information literacy by developing professional research skills and analyzing sources. Revise written work through a workshop process that requires giving, receiving, and implementing feedback.

**Requisites:** Satisfied Communications A requirement; no concurrent enrollment with GEN BUS 110 or 120

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 365 – CONTEMPORARY TOPICS**

1-3 credits.

A course for the exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing or declared in undergraduate Business Exchange program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GEN BUS 370 – CASE INTERVIEW ANALYSIS**

1 credit.

Provides a fundamental understanding of how to prepare for a case interview, analyze problems based on limited information, consider alternatives to develop a solution and present the solution effectively.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 399 – READING AND RESEARCH-BUSINESS RESEARCH**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**GEN BUS 450 – PROFESSIONAL EXPERIENCE IN BUSINESS**

1 credit.

Internship which allows students to augment their business education and gain professional experience in their major through related work experience. Intended for undergraduates in the School of Business. Not available with firms who participate in the ACCT I S 600 internship. See listing on Accounting Dept. website.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**GEN BUS 451 – PROFESSIONAL EXPERIENCE IN BUSINESS-EXTENDED INTERNSHIP**

1 credit.

Only allowed for six to eight month internships which will allow students to augment their business education and gain professional experience in their major area. Students receive one credit and will remain a full-time student. Intended for undergraduates in the School of Business

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 656 – MACHINE LEARNING FOR BUSINESS ANALYTICS**

2-3 credits.

An introduction to machine learning techniques in business. The focus is on applications for solving business problems, including hands-on practice in the context of various real-world data sets. It covers machine learning foundations, different methodological approaches, and implementation tools for machine learning for business applications. The methods include both supervised learning techniques (linear regression and classification, non-linear regression, CARTs, random forests, SVMs, artificial neural nets, etc.) as well as unsupervised learning techniques (clustering, principal components, etc.).

**Requisites:** GEN BUS 307, 704, 705, STAT/MATH/STAT 310, or STAT 312

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 700 – MANAGERIAL COMMUNICATION**

1-2 credits.

Focuses on strategic aspects of communication goals for managers and practice in skills needed to carry out writing and speaking objectives.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**GEN BUS/R M I 701 – MANAGING LEGAL RISKS**

3 credits.

Legal implications for business managers of selected areas of the law including negligence, contract, intellectual property, officer/director liability, financing the business enterprise, and employment and trade regulation; introduction to the legal process, including alternative dispute resolution systems.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**GEN BUS 704 – DATA TO DECISIONS**

2-3 credits.

Exploration of statistical inference and data analytics tools. Review of relevant foundations of statistics, machine learning and probability theory. Emphasis on applying the resulting concepts to canonical business examples, using both Excel and R.

**Requisites:** Declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS 705 – STATISTICS AND PROGRAMMING FOR BUSINESS ANALYTICS**

3 credits.

A compact primer in statistics and an introduction to programming as a foundation for data-driven business analyses. The first part covers elementary concepts such as random variables, probability distributions, estimation, and ordinary least-squares regression. In the second part, the course exposes students to Python and R programming, including numerical and statistical packages that are relevant for practical applications in business.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GEN BUS 710 – ETHICS, INTEGRITY AND SOCIETY**

1 credit.

This class is designed to prepare students for dealing with ethical challenges in the world outside academia. Focus is on the role of personal values in all types of decision making, from personal to professional.

**Requisites:** Declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 711 – FINANCIAL MANAGEMENT OF HEALTHCARE ORGANIZATIONS**

2-3 credits.

Creates understanding of the critical contemporary accounting and financial management issues impacting healthcare provider organizations. Presents the fundamentals of financial accounting and financial statement analysis of health care organizations. Addresses financial management of healthcare organizations by first adapting a longer-term perspective through capital budgeting and finance. This longer-term strategic perspective is then extended into balanced scorecard reporting for health care organizations where we consider strategic metrics around financial performance, patient and payer satisfaction, internal process improvement, and organizational learning and growth through investment in human capital and technology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**GEN BUS 712 – LEADERSHIP AND INNOVATION IN HEALTHCARE**

2-3 credits.

Leading innovations and improvements in healthcare is an essential skill set in today's healthcare marketplace. Applying and synthesizing theories of leadership, innovation, informatics, and business concepts to complex health care systems to improve outcomes will be covered. Current and emerging issues, theories, and case studies will be used to explore attributes of innovative leaders, emerging models of care, models/frameworks of innovation, emergence and disruption, creativity and innovation through evidence. There will be a focus on the role of the leader in the selection and implementation of technology and policy innovations. Primary deliverable is the creation of a business plan for an innovative program or service.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 713 – ROLE OF BUSINESS IN SOCIETY**

2 credits.

Explores and implements the critical thinking, communication, and managerial skills necessary for developing ethical organizations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 714 – CORPORATE GOVERNANCE AND BOARD MEMBERSHIP**

2-3 credits.

Explore the roles and responsibilities of Management and Directors in protecting the interests of Shareholders and other Stakeholders. Topics include: the history of Corporate Governance, Board of Directors responsibilities, Corporate Governance nuances outside of the U.S., and current trends in Corporate Governance. Analyze how an entity's Corporate Governance environment can either prevent or permit failures and have a direct impact on the success of an organization.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 720 – DATA VISUALIZATION FOR BUSINESS ANALYTICS**

1-2 credits.

Introduce students to principles of data visualization and provide hands-on experience using data visualization tools and techniques for business applications. Develop proficiency in current visualization software tools, and leverage these tools for data exploration, insight into decision-making, and data presentation. Recommended for students to have general computing skills and familiarity with MS Word, MS Excel and MS PowerPoint; introductory-level exposure to coding in any language; some R experience; basic statistical literacy, equivalent to at least one semester of statistics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS 725 – CONSULTING PRACTICUM**

1 credit.

Solve critical business challenges. Drawing on and integrating the MBA core curriculum, conduct an in-depth analysis and make recommendations on a strategic problem posed by the sponsor company.

**Requisites:** GEN BUS 704, ACCT I S 700, FINANCE 700, M H R 706, MARKETNG 700, and OTM 700

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 730 – PRESCRIPTIVE MODELING AND OPTIMIZATION FOR BUSINESS ANALYTICS**

2-3 credits.

Introduction to fundamentals of prescriptive analytics with emphasis on business applications. Modeling and mathematical optimization using Excel and Python. Designing, building, testing, and analyzing models, including sensitivity and risk analysis. Developing and solving optimization models, including linear, integer, and nonlinear problems. Course includes some principles of model-building and fundamentals of optimization theory but emphasizes practical application, hands-on learning, and problem-driven exercises.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS 740 – EXPERIMENTS AND CAUSAL METHODS FOR BUSINESS INSIGHTS**

2-3 credits.

Provides an introduction to experimental and causal methods for driving business insights. Topics include: (1) Review and distinction of correlation vs. causation; (2) design and analysis of randomized-controlled experiments; and (3) identification of "natural experiments" in business data and corresponding empirical strategies.

**Requisites:** (GEN BUS 704 or 705) and (GEN BUS 720 or concurrent enrollment); or GEN BUS 881

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS 745 – ROBOTIC PROCESS AUTOMATION**

1-2 credits.

Explore the fundamentals of Robotic Process Automation, including common use cases and popular tools. Provides an opportunity to automate a variety of processes using this technology.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 746 – ADVANCED SQL & DATA WAREHOUSING**

2 credits.

Provides an opportunity to construct advanced SQL statements (including joins, common table expressions, window functions, etc.) and build cloud data warehouses in a variety of software vendor platforms.

**Requisites:** (GEN BUS 760 and 780), (GEN BUS 882 and 883), or member of Graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 750 – PROFESSIONAL EXPERIENCE IN BUSINESS**

1 credit.

Internship which allows students to augment their business education and gain professional experience in their major through related work experience.

**Requisites:** Declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEN BUS 760 – DATA TECHNOLOGY FOR BUSINESS ANALYTICS**

2-3 credits.

Focuses on various technologies needed to perform data analytics. Techniques of extracting structured and unstructured data from databases, applications, or social networks. Transform and combine data with other relevant information and load into targeted systems. How to use programming languages to collect data from the web and leverage libraries for other, more, advanced data analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEN BUS/ECON/STAT 775 – INTRODUCTION TO BAYESIAN DECISION AND CONTROL I**

3 credits.

Common sampling models in business and economic problems, information from data, likelihood function of parameters, choices of models, Bayes' Theorem, subjective basis for probability, sequential nature of Bayesian inference, prior and posterior distributions of parameters in binomial, poisson, exponential and normal populations, comparison of two normal distributions, predictive distributions, decision theory, utility, risk aversion, extensive form of analysis, two-action problems, point estimation, best population problems, economics of sampling.

**Requisites:** STAT 609 or MATH/STAT/MATH 709

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS 777 – CONSULTING SKILLS BOOTCAMP**

1 credit.

An introduction to consulting tools and models.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 780 – CLOUD TECHNOLOGY FOR BUSINESS ANALYTICS**

1 credit.

Provides an overview of cloud services that support business analytics. Load and analyze data, build and deploy machine learning models, and develop data pipelines through hands-on, in-class activities working in cloud environments.

**Requisites:** Graduate/professional standing or member of graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEN BUS/ACCT I S/E P D 781 – FINANCIAL AND BUSINESS ACUMEN**

1 credit.

This course is designed with a keen awareness for the needs of the non-financial student or professional. For this class, no previous financial training is required. The intent is to equip you with the essential concepts used to develop financial literacy. Content will cover basic financial terms and reports, analytical tools to help interpret financial data and using financial data in budgets and forecasts.

**Requisites:** Graduate/professional standing. Not open to students declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GEN BUS/E P D/MARKETNG 782 – MARKETING FOR NON-MARKETING PROFESSIONALS**

1 credit.

An overview of marketing's role within an organization, the key elements of a marketing plan, and how the plan is implemented. Students will learn about buyer demographic, psychographic and purchasing decision behavior. A thorough understanding of the customer enables students to develop a coordinated marketing mix (product, price promotion and place) that will satisfy the customer better than the competition and at the required margin. Students will leave the course understanding the degree to which all company functions must be coordinated and focused on the customer. This course will not apply toward fulfilling the MBA degree requirements.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS/E P D/M H R 783 – LEADING TEAMS**

1 credit.

Students will gain the knowledge and skills to continuously enhance their own team performance and productivity as well as the teams they are involved with. They will also be in a much better position to lead teams effectively.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS/E P D/OTM 784 – PROJECT MANAGEMENT ESSENTIALS**

1 credit.

Techniques that will help to plan, execute, and deliver projects with desired scope on time and on budget. Learn to document clear project objectives and goals, accurately estimate project time and costs, schedule and allocate time-critical resources, and establish feedback systems for optimal project control.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GEN BUS/E P D/M H R 785 – EFFECTIVE NEGOTIATION STRATEGIES**

1 credit.

Improves students' negotiating skills, doing so by providing a theoretical underpinning that will help them to understand the sources of effective and ineffective approaches to negotiations.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GEN BUS 790 – CAPSTONE CONSULTING PRACTICUM**

1-3 credits.

Provides an opportunity to bring together all material learned throughout the program and synthesize it through an applied consulting project.

Explore and apply concepts to a future career through: identifying and understanding the business challenge, applying analytic methods to discover insight(s) to answer the business challenge, developing recommendations based on the findings, and communicating those findings and recommendation(s).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEN BUS 791 – EMBA CONSULTING PRACTICUM I**

1 credit.

Provides an opportunity to bring together all of the material learned throughout the program and synthesize it through an applied consulting project. Allows exploration and application of concepts to a future career through identifying and understanding the business challenge and applying research and analysis to discover insight(s).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 792 – EMBA CONSULTING PRACTICUM II**

1 credit.

Provides an opportunity to bring together all the material learned throughout the program and synthesize it through an applied consulting project. Allows exploration and application of concepts to a future career through developing recommendations based on the research and findings from the first course and communicating those findings and recommendation(s).

**Requisites:** GEN BUS 791

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 799 – READING AND RESEARCH-BUSINESS RESEARCH**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GEN BUS 806 – PANEL DATA ANALYSIS**

3 credits.

Linear fixed and random effects models; estimation and prediction; data exploration, diagnostics and model selection techniques; generalized linear panel data models.

**Requisites:** STAT 849 and ECON 709

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEN BUS 840 – CURRENT TOPICS IN BUSINESS ANALYTICS**

1-2 credits.

Expose students to emerging and current topics in the industry through applied learning experiences - case studies, industry meetings, and exercises or workshops.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023



**GEN BUS 881 – BUSINESS STATISTICS USING PYTHON**

2 credits.

A compact primer in statistics as a foundation for data-driven business analysis. A selection of concepts include probability, estimation, inference, correlation, and regression.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 882 – SQL FUNDAMENTALS**

2 credits.

Construct a wide variety of SQL statements; such as joins, common table expressions, window functions, etc. Basics of query optimization and data modeling.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 883 – DATA VISUALIZATION & CLOUD TECHNOLOGIES**

2 credits.

Provides experience in data visualization and cloud technologies to support business analytics. Create and share compelling data visualizations to enhance decision making. Use cloud technologies to build scalable data warehouses, analyze big data, and develop and deploy machine learning models.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program. Not open to students with credit for GEN BUS 720 or 780.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 884 – APPLIED ANALYTICS - CASE STUDIES**

2 credits.

Project-based applications of statistics, programming, data visualization, and database management.

**Requisites:** GEN BUS 881, 882, and 883

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 885 – PYTHON FUNDAMENTALS**

2 credits.

Explore the fundamentals of the Python programming language - such as data structures, functions, loops, and control flow - and utilize Python for data wrangling and analysis.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 886 – FOUNDATIONS OF PREDICTIVE MODELING FOR BUSINESS ANALYTICS**

2 credits.

An introduction to predictive modeling for business applications beginning with some of the foundations, including a primer in matrix algebra and numerical optimization. Leads to development of linear regression and classification models, and discussion of building models for prediction. Topics include selection, regularization, and the bias-variance tradeoff.

**Requisites:** GEN BUS 881

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 888 – APPLIED MACHINE LEARNING FOR BUSINESS ANALYTICS**

2 credits.

An introduction to machine learning models for business applications. Builds on the predictive modeling basics by developing general algorithmic prediction models for supervised machine learning. Covers additive models, CARTs, bagging/boosting, and basic deep learning approaches. Discussion of unsupervised learning techniques, including clustering and dimensionality reduction approaches.

**Requisites:** GEN BUS 886

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 891 – TEXT MINING FOR BUSINESS ANALYTICS**

2 credits.

An introduction to text mining and natural language processing for business applications. Includes an overview of text data and steps to make it usable. Addresses approaches for making text data useful in descriptive and predictive analytics applications. Topics include representation approaches and topic modeling. Includes an overview of key applications of natural language processing, including chatbots and recommender systems.

**Requisites:** GEN BUS 883 and 888

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 893 – ANALYTICS CONSULTING PROJECT MANAGEMENT**

2 credits.

Lays the foundation for understanding how to engage with external and internal clients and manage a business analytics consulting project. Covers consulting tools and models, as well as traditional and agile project management tools and concepts.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEN BUS 894 – PITFALLS, ETHICS, COMMUNICATION, AND LEADERSHIP IN BUSINESS ANALYTICS**

2 credits.

Focus on applications, highlighting key practical issues in analytics projects. Discussion of pitfalls with regards to analytics applications, ethical aspects of analytics applications, as well as talent management and leadership in the context of analytics.

**Requisites:** GEN BUS 883 and 888**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**GEN BUS 895 – MASTERS CAPSTONE IN BUSINESS ANALYTICS**

2 credits.

Complete a team project as a capstone to graduate studies in business analytics. Use analytics and project management to develop a solution to a provided business case.

**Requisites:** GEN BUS 884 and 893**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**GEN BUS 933 – BEGINNING A RESEARCH CAREER IN BUSINESS**

1 credit.

Required of incoming students in the Wisconsin School of Business PhD program. Students are often overwhelmed and do not absorb material when offered all at once before they begin their regular courses. This format offers fundamental content about conducting research and academic life that is not specific to a given department in the business school, but will help to frame and motivate other studies. This format gives students more time to absorb the content at a point when they can better see how it applies to them.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEN BUS 999 – READING AND RESEARCH-BUSINESS RESEARCH PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2001

## GENETIC COUNSELOR STUDIES (GENECSLR)

**GENECSLR 713 – INTRODUCTORY PRACTICUM IN GENETIC COUNSELING**

3 credits.

Provides opportunities to develop skills in interviewing, data collection, case management and counseling through didactic work and observational and experiential clinical activities. Activities include clinic observation according to a structured format, and fieldwork participation.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 714 – INTRODUCTORY PRACTICUM IN GENETIC COUNSELING**

3 credits.

Provides additional opportunities to develop and improve skills in interviewing, data collection, case management and counseling. Develop skills through didactic work and observational and experiential clinical activities. Activities include clinic observation according to a structured format, and fieldwork participation.

**Requisites:** GENECSLR 713**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 721 – INTRODUCTION TO CLINICAL GENETICS**

2 credits.

Integrative introduction to the mechanisms of clinical genetic disease at the molecular, individual and population level.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 724 – CANCER GENETICS RISK ASSESSMENT AND COUNSELING**

2 credits.

Provides a background in cancer genetics from a medical, biological, and clinical perspective. Includes: general principles and topics in oncology; familial cancers and cancer syndromes; and management, counseling, social, ethical, and legal issues.

**Requisites:** GENECSLR 721**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GENECSLR 731 – ADVANCED CLINICAL GENETICS CONCEPTS**

3 credits.

An advanced course covering clinical genetic concepts including phenotype, genetic mechanisms, approach to diagnosis (medical, clinical and genetic testing protocols), and natural history (including management approaches).

**Requisites:** GENECSLR 721**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 737 – CONTEMPORARY PROFESSIONAL ISSUES IN GENETICS COUNSELING**

1 credit.

A series of selected basic issues and topics that are core curricular requirements specific to genetics counseling.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 4 number of completions**Last Taught:** Spring 2023**GENECSLR 739 – RESEARCH STRATEGIES AND ANALYSIS IN CLINICAL GENETICS**

1 credit.

Introduction to a variety of tools and resources commonly used in clinical genetics. Learn to critique these resources and start thinking about developing their own research projects. Emphasizes developing oral presentation skills through a variety of student presentations.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 740 – LABORATORY GENETICS AND GENOMICS FOR THE GENETIC COUNSELOR**

2 credits.

Introduction to clinical laboratory genetics with a particular focus on the relevance of human cytogenetics and molecular genetics to the practice of medical genetics. Covers the fundamental principles of human cytogenetic and molecular genetics including human chromosome structure, function, cytogenetic and molecular nomenclature, and current clinical laboratory testing methods relevant to medical genetic professionals. Apply cytogenetic and molecular genetic understanding to clinical scenarios to help diagnosis and manage individuals with genetic disease.

**Requisites:** GENECSLR 721**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 741 – INTRODUCTION TO GENETIC COUNSELING**

1 credit.

Emphasis will be on the tasks necessary to complete a genetic counseling session including, contracting/goal setting, history gathering, education, psychosocial assessment and support, clinical documentation and session management.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 742 – CLINICAL EMBRYOLOGY AND PRENATAL GENETICS**

1 credit.

Review human development (normal and abnormal) and the influence of genetic disorders and teratogens, common indications for prenatal genetic counseling as well as available prenatal diagnosis and screening techniques. Prepares the genetic counseling student for the prenatal clinical practicum.

**Requisites:** GENECSLR 721**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 743 – ADVANCED INTERVIEWING AND COUNSELING FOR THE GC I**

1 credit.

Advanced topics in clinical communication skills for the genetic counselor. Emphasis on different counseling strategies and approaches including counselor self-reference, facilitating family communication, shared decision-making, crisis counseling and, applying techniques from select counseling models to GC practice (e.g., cognitive behavioral therapy, solution-focused therapy).

**Requisites:** GENECSLR 741**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 744 – APPLICATIONS OF BIOCHEMICAL GENETICS FOR GENETIC COUNSELORS**

2 credits.

Comprehensive overview of clinical biochemical genetics through a systematic review of classic and rare inborn errors of metabolism (IEM). Psychosocial issues are discussed as related to care of patients, and their families, with metabolic disorders.

**Requisites:** Declared in Master of Genetic Counselor Studies**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GENECSLR 745 – SEMINAR IN MEDICAL GENETIC COUNSELING RESEARCH**

1 credit.

Practice qualitative and quantitative research methods in genetic counseling. Develop research question, prepare research proposal including internal review board application.

**Requisites:** GENECSLR 739**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 748 – SPECIAL TOPICS IN GENETIC COUNSELING**

1 credit.

Advanced topics in the discipline of genetic counseling. Emphasis will be on advanced practice topics including setting boundaries, delivering life altering news, developing a socially responsible practice, moving from a novice to master counselor, and the job search.

**Requisites:** GENECSLR 743**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 813 – ADVANCED PRACTICUM IN GENETICS COUNSELING**

4-5 credits.

Advanced practicum experience for second year genetic counseling students, consisting of participatory fieldwork experiences in a diversity of clinic specialties and service delivery methods.

**Requisites:** GENECSLR 714**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENECSLR 814 – ADVANCED PRACTICUM IN GENETICS COUNSELING**

4-5 credits.

Advanced practicum experience consisting of participatory fieldwork experiences in a diversity of clinic specialties and service delivery methods.

**Requisites:** GENECSLR 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENECSLR 990 – RESEARCH IN GENETIC COUNSELING**

1-8 credits.

Research and/or scholarly work (e.g. quality improvement, clinical case reports) supervised by faculty and/or staff member with appropriate content expertise and/or experience in research mentorship.

**Requisites:** GENECSLR 739 and 745**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 3 number of completions**Last Taught:** Spring 2023**GENETICS (GENETICS)****GENETICS 133 – GENETICS IN THE NEWS**

3 credits.

The science of genetics is at the heart of many issues facing our society, and as such, genetics is often in the news. Explores the underlying genetics and methodologies to gain a deeper understanding of the science behind the headlines so that we can make more informed decisions as citizens.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 155 – FRESHMAN SEMINAR IN GENETICS**

1 credit.

Introduction to the discipline of genetics, to the UW Laboratory of Genetics, to some of the research projects the faculty are pursuing, to resources available at UW-Madison, and to the career options open to an individual with a genetics undergraduate degree.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area encompassing Genetics. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2010**GENETICS 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area encompassing Genetics. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GENETICS 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**GENETICS 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Genetics and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GENETICS 400 – STUDY ABROAD IN GENETICS**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**GENETICS 466 – PRINCIPLES OF GENETICS**

3 credits.

Genetics in eukaryotes and prokaryotes. Includes transmission genetics, molecular genetics, evolutionary genetics, genetic engineering, and societal issues associated with genetics. Illustrative material includes bacteria, plants, insects, and vertebrates.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 381 or BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) and (CHEM 104 or CHEM 109 or CHEM 115). Not eligible to enroll if credit earned for GENETICS 467 or 468

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 467 – GENERAL GENETICS 1**

3 credits.

Genetics of eukaryotes and prokaryotes. Includes Mendelian genetics, probability and hypothesis testing, genetic mapping, molecular genetics, gene expression and genetic engineering. Illustrative material includes viruses, bacteria, plants, fungi, insects, and humans.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, or BIOLOGY/BOTANY/BIOLOGY 130) and (CHEM 104, 109, or 115). Not open to students with credit for GENETICS 466.

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 468 – GENERAL GENETICS 2**

3 credits.

Genetic analysis, population genetics, evolution and quantitative genetics. Includes mutant screens, pathway analysis, mosaic analysis, reverse genetics, genomics, Hardy-Weinberg linkage equilibrium, inbreeding, genetic drift, natural selection, population structure, inheritance of complex traits, domestication and human evolution.

**Requisites:** GENETICS 467**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 470 – BASIC CYTOLOGY AND LABORATORY PROCEDURES**

1 credit.

A comprehensive review of cellular biology, the study of optical methods with emphasis on the light microscope and the various techniques used in preparation and staining of specimens for cytologic and histologic study.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 471 – ADVANCED LABORATORY PROCEDURES**

1 credit.

Preparation of non-gynecologic cytologic specimens using several different instrument methodologies. Application of universal precautions and safety in the handling of unknown biologic hazards. Introduction to histologic preparatory techniques and special staining methods.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 520 – NEUROGENETICS**

3 credits.

The genetic basis of nervous system development, structure, function, and dysfunction. Will emphasize both current research findings on the genetic basis of specific neurological disorders, as well as genetic methodologies and experimental approaches used in neurobiological research.

**Requisites:** GENETICS 466, 467, BIOCORE 587, PSYCH/ZOOLOGY/PSYCH 523, or PSYCH 454

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GENETICS/BIOLOGY 522 – COMMUNICATING EVOLUTIONARY BIOLOGY**

2-3 credits.

Exposure to diverse topics in contemporary evolutionary biology and development of critical thinking and communication skills. Most weeks guest lecturers present their own primary research on a specialized topic in evolutionary biology. Seminars include perspectives from genetics, ecology, geoscience, zoology, botany, microbiology, systematics, molecular biology, and integrative research. Some weeks feature special topics and discussions on pedagogical, legal, outreach, or other issues in evolutionary biology. Includes thinking critically about methodology, experimental design and interpretation, and how conclusions are reached in evolutionary biology by reading primary and secondary literature, attending seminars, discussing topics with speakers and other students, and preparing a written report. The 3-credit version of the course delves deeper into communication of evolutionary biology to researchers, undergraduates, K-12 students, and the general public.

**Requisites:** GENETICS 466, 468, ANTHRO/BOTANY/ZOOLOGY/ ANTHRO/BOTANY 410, or BIOCORE 381, or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GENETICS 525 – EPIGENETICS**

3 credits.

Introductory course in epigenetics – the layer of chemical information that sits on top of the genome – that switch genes 'on' or 'off'. Will introduce how the epigenome, in collaboration with the genome, controls versatile biological processes and cell fates. Will also cover the latest advances of how humans can control their own epigenetic destiny by lifestyle, diet, and other environmental factors.

**Requisites:** GENETICS 466 or 467

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GENETICS 527 – DEVELOPMENTAL GENETICS FOR CONSERVATION AND REGENERATION**

3 credits.

Human-induced factors such as changes in land use and global climate are causing rapid worldwide biodiversity loss. Can modern molecular genetics contribute to species preservation? In this course, we will first explore the challenges and potential of molecular genetic methods based on biobanking, gene editing and nuclear transfer for animal biodiversity preservation. Topics covered will include: i) maternal factors and early animal development, ii) interspecies somatic cell nuclear transfer (isSCNT) and oocyte-mediated reprogramming in animal cloning, iii) developmental, phylogenetic and ecological considerations for biobanking, iv) gene editing and synthetic biology as potential tools to recapture biodiversity. Use knowledge in animal population status, developmental genetics and phylogeny to address real-life problems involving the conservation of threatened animal populations.

**Requisites:** GENETICS 466, 467, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GENETICS 528 – BANKING ANIMAL BIODIVERSITY: INTERNATIONAL FIELD STUDY IN COSTA RICA**

1 credit.

Study abroad course that provides an on-site educational experience where we use developmental genetics concepts to guide projects of biobanking and oocyte-mediated cloning, as a potential last-defense resort for the preservation of living species under risk of extinction. It will provide hands-on experience in current research and activities in biodiversity areas, including visits to biodiversity-rich ecosystems, on site seminars and demonstrations, biodiversity preservation activities, as well as exposure to local culture and social needs.

**Requisites:** GENETICS 466, 467, BIOCORE 381, or ZOOLOGY 470

**Repeatable for Credit:** No

**GENETICS 545 – GENETICS LABORATORY**

2 credits.

Gain practical experience in classical and molecular genetic laboratory techniques using plants, animals, and fungi. Topics include complementation and linkage analysis, gene mapping, library screening, yeast and bacterial transformation, restriction analysis, PCR, sequencing, and Southern blot analysis.

**Requisites:** GENETICS 466 or 467

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**GENETICS 548 – THE GENOMIC REVOLUTION**

3 credits.

Profound advances are now possible thanks to genomic data and analysis. Introduces the structure, function, and evolution of genomes. It also outlines the realized and prospective benefits of genomic technology for human health, agriculture, and conservation.

**Requisites:** GENETICS 466, 468, or BIOCORE 587**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/HORT 550 – MOLECULAR APPROACHES FOR POTENTIAL CROP IMPROVEMENT**

3 credits.

Introduction of basic concepts of plant molecular biology and molecular techniques in current use. Topics include: organization and regulation of plant genes, gene cloning and analysis, transformation systems for plants, and molecular techniques for crop improvement.

**Requisites:** BIOCHEM 501 and (GENETICS 466 or 467); or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 564 – GENOMICS AND PROTEOMICS**

3 credits.

The basic principles of genomics, proteomics and bioinformatics will be taught through a semester-long project of the students choosing. Creative problem solving in science skills will be learned through a variety of active-learning techniques that include: reading of primary literature, group presentations, peer review, bioinformatic lab exercises, science communication skills (writing visualization), and creating a website. Emphasis will be placed upon how to effectively communicate science (written, oral and written). Topics include: genomic sequencing, phylogeny, domain analysis, transcriptomics, CRISPR screens, chemical genomics, quantitative proteomics and protein networks. Capstone course.

**Requisites:** GENETICS 466, 468, or BIOCORE 587. Not open to graduate students**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/MD GENET 565 – HUMAN GENETICS**

3 credits.

Principles, problems, and methods of human genetics. Surveys aspects of medical genetics, biochemical genetics, molecular genetics, cytogenetics, quantitative genetics, and variation as applied to humans.

**Requisites:** Graduate/professional standing, GENETICS 466, 468, or BIOCORE 587**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 566 – ADVANCED GENETICS**

3 credits.

Principles of classical and modern genetic analysis taught through readings in the scientific literature and group projects. Capstone course.

**Requisites:** Declared in Genetics undergraduate program and GENETICS 466, 468, or BIOCORE 587**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 567 – COMPANION RESEARCH SEMINAR**

1 credit.

Student-led discussions on scientific, societal, and professional topics relevant to Senior research and selected original research presentations.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 568 – THE CENTRAL NERVOUS SYSTEM**

1 credit.

Anatomy, physiology, histology and pathology of the central nervous system and the corresponding cellular manifestations which provide diagnostic information. Cell changes related to specimen preparation. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 569 – THE BREAST**

1 credit.

Anatomy, histology, physiology and pathology of the breast and the corresponding cellular manifestations which provide diagnostic information. Cell changes related to specimen processing. Correlation of the didactic information with the microscopic cell patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GENETICS 570 – THE FEMALE REPRODUCTIVE SYSTEM**

8 credits.

Anatomy, histology, physiology, and pathology of the female reproductive tract and the corresponding cellular manifestations which provide diagnostic information. Cellular changes due to therapy and specimen collection. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 571 – CLINICAL PRACTICE I**

1 credit.

Clinical practicum to develop diagnostic expertise involving the microscopic examination of routine gynecologic specimens (Pap smears). Observe the signout of abnormal cytologic specimens by cytopathologist staff.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 572 – THE RESPIRATORY SYSTEM**

3 credits.

Anatomy, histology, physiology and pathology of the respiratory tract and the corresponding cellular manifestations which provide diagnostic information. Cell changes related to specimen processing. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 573 – THE GENITOURINARY SYSTEM**

2 credits.

Anatomy, physiology, histology and pathology of the urinary tract and male reproductive systems and the corresponding cellular manifestations which provide diagnostic information. Cell changes related to specimen processing. Correlation of didactic information with microscopic cell patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 574 – THE GASTROINTESTINAL SYSTEM**

3 credits.

Anatomy, histology, physiology and pathology of the gastrointestinal system and the corresponding cellular manifestations which provide diagnostic information. Cell changes related to specimen processing. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 575 – MISCELLANEOUS SYSTEMS**

3 credits.

Anatomy, histology, physiology and pathology of skin, thyroid, lymph nodes and other sites and the corresponding cellular manifestations which provide diagnostic information. Emphasis on specimen collection by fine needle aspiration. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 576 – EFFUSIONS**

2 credits.

Anatomy, physiology, histology and pathology of the body cavities. Cytologic manifestations which provide diagnostic information. Cell changes related to specimen processing. Correlation of the didactic information with the microscopic cellular patterns to provide a diagnosis.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 577 – APPLIED CYTOLOGY I**

1 credit.

Written and practical application of the comprehensive body of knowledge to all aspects of preparation, evaluation, correlation and diagnosis of cytologic specimens.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 578 – APPLIED CYTOLOGY II**

1 credit.

Written and practical application of the advanced comprehensive body of knowledge to all aspects of preparation, evaluation, correlation and diagnosis of cytologic specimens. Practice in nationally offered cytologic examinations.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Summer 2022**GENETICS 588 – IMMUNOGENETICS**

3 credits.

Immunogenetics focuses on the unique genetic phenomena that occur in lymphocytes during development and response to stimuli. It pays particular attention to the processes of adaptive antigen receptor development and maturation, major histocompatibility complex molecule polygeny and polymorphism in the context of current real-life challenges (e.g. COVID-19, influenza, and HIV), immunological evolution, epigenetics associated with autoimmunity, sex differences in immune responses, and some genetic processes involved in cancer of white blood cells. Ultimately, the genetic mechanisms that drive the immunological and clinical differences observed between individuals when confronted with the same challenge will be examined, and explored through the primary and secondary research literature in order to strengthen scientific literacy.

**Requisites:** GENETICS 466, 467 or BIOCORE 383**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GENETICS 605 – CLINICAL CASES IN MEDICAL GENETICS**

3 credits.

The use of genetics in medicine has experienced significant growth over the past 50 years, identifying risk genes, and devising diagnostic tests and therapies based on this knowledge for specific clinical disorders such as cystic fibrosis, achondroplasia, and Retts syndrome. MDs and biomedical scientists from UW Hospital and Clinics, the School of Medicine and Public Health, and other UW units will present lectures in this field followed by question-answers sessions. Other class sessions will be devoted to student presentations and open discussion of research literature.

**Requisites:** GENETICS 466, 467 or BIOCORE 383**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/BIOCHEM/MICROBIO 612 – PROKARYOTIC MOLECULAR BIOLOGY**

3 credits.

Molecular basis of bacterial physiology and genetics with emphasis on molecular mechanisms; topics include nucleic acid-protein interactions, transcription, translation, replication, recombination, regulation of gene expression.

**Requisites:** (BIOCHEM 501 or 507) and (MICROBIO 470, GENETICS 466 or 468) or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS/AGRONOMY/AN SCI/HORT 615 – GENETIC MAPPING**

3 credits.

Computing-intensive course to prepare students for genetic mapping research; linkage analysis and QTL mapping in designed crosses; linkage disequilibrium and association analysis (GWAS). Recommended preparation is undergraduate courses in genetics and statistics and prior experience writing R scripts (such as module 1 of STAT 327).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/BIOCHEM/MD GENET 620 – EUKARYOTIC MOLECULAR BIOLOGY**

3 credits.

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms.

**Requisites:** BIOCHEM 501, 508 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/ENTOM/ZOOLOGY 624 – MOLECULAR ECOLOGY**

3 credits.

Basic principles of molecular ecology. Lecture topics include population genetics, molecular phylogenetics, rates and patterns of evolution, genome evolution, and molecular ecology.

**Requisites:** GENETICS 466, 467, BIOCORE 383, or graduate student standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/CHEM 626 – GENOMIC SCIENCE**

2 credits.

Brings cutting-edge topics in the genomic sciences into the reach of those in chemistry, biology, engineering, computer science statistics fields. Enables biologically-oriented students to deal with advances in analytical science so that they may incorporate new genomic science concepts into their own scientific repertoires.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 627 – ANIMAL DEVELOPMENTAL GENETICS**

3 credits.

Advanced genetics course focusing on genetic mechanisms of animal embryonic development, with particular emphasis on central molecular circuitries that control development and genetic analytical tools used to reveal them. Address topics including maternal and epigenetic inheritance, the egg-to-embryo transition, pattern formation, organogenesis, coordination of cellular and molecular mechanisms, and animal models of human congenital disorders.

**Requisites:** GENETICS 466, 468, or BIOCORE 587**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GENETICS/BIOCHEM 631 – PLANT GENETICS AND DEVELOPMENT**

3 credits.

Covers the basic concepts of genetics and genomics as applied to plants and their development, including discussions on breeding systems (modes of reproduction, sex determination, self incompatibility and crossing barriers), linkage analysis, genome structure and function (structure, function and evolution of nuclear and organellar chromosomes; haploidy and polyploidy; expression regulation and epigenetics), along with a description of current methodologies used in the analysis of these processes within the context of plant development. The objective is to instigate a broader knowledge and understanding of the principles and methodologies used in plant genetics and their applications in investigations of the molecular mechanisms that modulate plant development.

**Requisites:** GENETICS 466, 468, BIOCORE 587, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GENETICS 633 – POPULATION GENETICS**

3 credits.

Population genetics, aimed at preparing students to initiate research in this field. Explore how genetic variation is influenced by mutation and recombination, population size changes and migration, and natural selection for or against new mutations.

**Requisites:** GENETICS 466, 468, BIOCORE 381, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GENETICS/MD GENET/POP HLTH 636 – PUBLIC HEALTH GENOMICS**

1 credit.

Provides an introduction to public health genomics through a review of fundamental principles of genetics, the use of genetic information in clinical and research settings, and its implications for disease management and prevention, and health promotion. Explores policies that guide public health and discusses current ethical, legal, and social implications of these policies.

**Requisites:** (Junior standing and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151) or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GENETICS/BOTANY/M M & I/PL PATH 655 – BIOLOGY AND GENETICS OF FUNGI**

3 credits.

Fungal genetics, genomics, and physiology using plant pathogenic fungi and the genetic models *Aspergillus nidulans* and *Neurospora crassa* as model systems to explore the current knowledge of fungal genetics and plant/fungal interactions.

**Requisites:** Graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GENETICS/MD GENET 662 – CANCER GENETICS**

3 credits.

Cancer remains one of the most difficult health issues facing our society. There is hope in the horizon due to an increasing understanding of both genetic and epigenetic alterations in cancer. In particular, DNA sequencing of human cancers is becoming more common in major health care centers, and there is expectation that this technology will allow for personalized medicine. Thus, there has been a rapid increase in this knowledge over the last decade. Become aware of the current major issues in cancer research and critically evaluate the cancer genetics literature.

**Requisites:** GENETICS 466, 467 or BIOCORE 383

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GENETICS 670 – SEMINAR IN CLINICAL CYTOGENETICS**

1 credit.

Overview of the basic features of chromosome structure and behavior including karyotyping clinical correlates of numerical and structural chromosome aberrations, sex chromosome abnormalities, breakage syndromes and the chromosomal changes associated with the development of cancer.

**Requisites:** Declared in Cytotechnology

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GENETICS 671 – ADVANCED CLINICAL PRACTICE**

8 credits.

Clinical practicum to develop diagnostic expertise of cytologic specimens. Examine challenging cases with emphasis on diagnostic pitfalls. Observe patient clinics related to cytologic specimen collection. Participate at clinical experiences in fine needle aspiration, histology, and a private cytology laboratory.

**Requisites:** Declared in Cytotechnology

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GENETICS 672 – SEMINAR IN LABORATORY OPERATIONS AND QUALITY CONTROL**

1 credit.

Review the fundamentals of basic administrative functions and regulatory requirements including planning, organizing, supervising and controlling business management, record keeping, data processing and laboratory safety. Quality assurance procedures necessary for obtaining, processing, diagnosing and reporting cytologic specimens.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 673 – SEMINAR IN CLINICAL CYTOLOGY**

1 credit.

Preparation of a case study or clinical topic of choice by each student to present to a peer professional group of cytology staff and medical faculty. Preparation of a referenced scientific term paper or participation in an approved research or class project pertaining to clinical cytology.

**Requisites:** Declared in Cytotechnology**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/MD GENET 677 – ADVANCED TOPICS IN GENETICS**

1-3 credits.

Contents vary; consideration of subjects not included in the curriculum.

**Requisites:** Graduate/professional standing, GENETICS 466, 468, or BIOCORE 383**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**GENETICS 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GENETICS 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS 699 – SPECIAL PROBLEMS**

1-3 credits.

Individual advanced work in an area of Genetics under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GENETICS 701 – ADVANCED GENETICS**

3 credits.

First semester of professional level training in genetic mechanisms and analysis as applied to genetic transmission, gene expression, forward and reverse genetics, molecular genetics, genomics, developmental genetics, and epigenetics.

**Requisites:** Declared in Genetics doctoral program**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GENETICS 702 – ADVANCED GENETICS II**

3 credits.

Second of semester of professional level training in genetic mechanisms and analysis as applied to genetic transmission, gene expression, forward and reverse genetics, molecular genetics, genomics, developmental genetics, and epigenetics.

**Requisites:** GENETICS 701**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GENETICS/MD GENET 707 – GENETICS OF DEVELOPMENT**

3 credits.

A research-level analysis of the current status of the investigation of processes controlling differential gene activity and cellular behavior. The major emphasis is genetic. In successive years, the focus moves from the gene to the cell to the organism.

**Requisites:** Declared in Genetics graduate program**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**GENETICS/MD GENET 708 – METHODS AND LOGIC IN GENETIC ANALYSIS**

3 credits.

Contemporary issues in genetic, developmental, cell, and molecular biology are addressed in a discussion format. Invited speakers give research lectures and reading material is taken from the primary literature. The discussion focuses on evaluating genetic approaches to biological problems.

**Requisites:** Declared in Genetics graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GENETICS/CRB 710 – DEVELOPMENTAL GENETICS**

3 credits.

Covers a broad range of topics in animal development, with an emphasis on molecular mechanisms. Focuses on common themes, with the goal of understanding and analyzing current research in developmental biology and genetics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GENETICS/BOTANY/ENTOM/ZOOLOGY 820 – FOUNDATIONS OF EVOLUTION**

2 credits.

Explore some of the most important themes and debates that have permeated evolutionary biology over the last 50 years. Read key papers related to each controversial topic, debate the pros and cons of competing viewpoints, and reflect on the relevance of the issue to contemporary evolutionary biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GENETICS/BIOCHEM/BOTANY 840 – REGULATORY MECHANISMS IN PLANT DEVELOPMENT**

3 credits.

Molecular mechanisms whereby endogenous and environmental regulatory factors control development; emphasis on stimulus perception and primary events in the signal chain leading to modulated gene expression and cellular development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GENETICS/AN SCI/POP HLTH 849 – GENETIC EPIDEMIOLOGY**

3 credits.

This course will provide an introduction to genetic epidemiology. Topics will include a general overview of genetics and Mendelian and complex inheritance, as well as various elements of study design, including participant ascertainment; phenotype definition; biologic sample selection; genotyping, sequencing, and quality control; measurement of covariates, and choice of analytic methods. We will briefly discuss some of the original study designs and then focus on current study designs for the remainder of the class. Additional emerging topics will be briefly touched upon. Students will complete short homework assignments to enforce concepts learned during lectures, discuss journal articles, and prepare a very short grant application for the mid-term project. In the final weeks of class, students will work together to analyze data from a real genetic study, prepare tables, interpret the findings, and present their project to their peers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GENETICS 875 – SPECIAL TOPICS**

1-4 credits.

Special topics of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**GENETICS 885 – ADVANCED GENOMIC AND PROTEOMIC ANALYSIS**

3 credits.

With the availability of genome sequences and high-throughput techniques, organismal physiology can now be examined on a global scale by monitoring the behavior of all genes or proteins in a single experiment. This course will present modern techniques in genomics and proteomics, with particular focus on analyzing the data generated by these techniques. Course material will cover genomic sequencing, comparative sequence analysis, phylogeny construction and phylogenomics, transcription factor motif discovery, DNA microarray analysis, techniques in mass spectrometry, proteomic screening methods, and protein-interaction network analysis. In addition to lecture time, the course includes computer lab where students get hands-on experience analyzing genomic and proteomic datasets. Students should have coursework in general statistics and intermediate or advanced genetics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**GENETICS/B M E/B M I/BIOCHEM/CBE/COMP SCI 915 –  
COMPUTATION AND INFORMATICS IN BIOLOGY AND MEDICINE**  
1 credit.

Participants and outside speakers will discuss current research in computation and informatics in biology and medicine. This seminar is required of all CIBM program trainees.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GENETICS/AN SCI/DY SCI 951 – SEMINAR IN ANIMAL BREEDING**  
0-1 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GENETICS/AGRONOMY/HORT 957 – SEMINAR-PLANT  
BREEDING**  
1 credit.

Graduate seminar in Plant Breeding Plant Genetics (PBPG) that requires students to give oral scientific presentations on topics chosen by the instructors and/or the student's thesis research. This seminar is coordinated by PBPG faculty on a rotating basis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GENETICS 990 – RESEARCH**  
1-12 credits.

Independent laboratory research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GENETICS 993 – SEMINAR IN GENETICS**  
0-1 credits.

Various aspects of genetics: Drosophila, maize, immunogenetics, developmental genetics, or other special topics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

## GEOGRAPHY (GEOG)

**GEOG 101 – INTRODUCTION TO HUMAN GEOGRAPHY**  
4 credits.

Human geographers explore socio-spatial relations, processes and representations of the world in which we live. Engages economic, political, urban, socio-cultural and environmental geographic perspectives to investigate patterns and processes that have come to be associated with 'globalization'.

**Requisites:** Not open to students with credit for GEOG 104

**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 104 – INTRODUCTION TO HUMAN GEOGRAPHY**  
3 credits.

Human geographers explore socio-spatial relations, processes and representations of the world in which we live. Engages economic, political, urban, socio-cultural and environmental geographic perspectives to investigate patterns and processes that have come to be associated with 'globalization'.

**Requisites:** Not open to students with credit for GEOG 101

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GEOG/ENVIR ST 120 – INTRODUCTION TO THE EARTH SYSTEM**  
3 credits.

Introduction to how the Earth system works and what makes Earth livable. Gain appreciation for how the atmosphere, oceans, life, and earth's surface interact to shape our local, regional and global landscapes.

**Requisites:** Not open to students with credit for GEOG/ENVIR ST/ GEOG 127

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ENVIR ST 127 – PHYSICAL SYSTEMS OF THE ENVIRONMENT**

5 credits.

Climatic regimes, landforms, soils, waters and life forms at the earth's surface in terms of energy-transforming processes, locational patterns, and changes through time.

**Requisites:** Not open to students with credit for GEOG/ENVIR ST/ GEOG 120

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/ENVIR ST 139 – GLOBAL ENVIRONMENTAL ISSUES**

3 credits.

Explores the global and local nature of environmental problems, including issues of climate change, food, energy, globalization, deforestation, biodiversity loss, resource access, environmental justice, and population. Considers how we should analyze and act on environmental problems as we confront the apparently daunting scale of such issues. What appear to be single global environmental issues are actually composed of many smaller, context-specific, and place-dependent problems or conflicts. Through an interdisciplinary and geographic perspective, these issues can be understood and addressed at the scale of our lived lives.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 170 – OUR DIGITAL GLOBE: AN OVERVIEW OF GISCIENCE AND ITS TECHNOLOGY**

3 credits.

Introduction to the collection, representation and use of geospatial data. Introduction to geospatial technologies like GPS, Google Earth, satellite imagery, and GIS, and provides a critical understanding of the strengths and limitations of spatial representations (e.g., maps, images).

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 175 – TOPICS IN GEOGRAPHY**

3 credits.

Explores emerging topics in human geography (e.g., economic geography, urban geography, political geography) and people-environment geography (e.g., political ecology, environmental history).

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**GEOG 198 – DIRECTED STUDY**

1-2 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2013

**GEOG 199 – DIRECTED STUDY**

1-2 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2004

**GEOG/ENVIR ST/SOIL SCI 230 – SOIL: ECOSYSTEM AND RESOURCE**

3 credits.

Soils are fundamental to ecosystem science. A systems approach is used to investigate how soils look and function. Topics investigated include soil structure, biology, water, fertility, and taxonomy as well as the human impact on the soil environment.

**Requisites:** Not open to students with credit for SOIL SCI 301

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ASIAN/HISTORY/POLI SCI/SOC 244 – INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES**

4 credits.

As an introduction to Southeast Asia, covers the ethnic, cultural, religious, and political histories of the region from the classical states period to the present, with an emphasis on colonialism, nationalism, decolonization, and the emergence of modern political and social systems into the 21st century, including an exposure to region's contemporary literature. Not open to students who completed LCA 244 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **GEOG/HISTORY/POLI SCI/SLAVIC 253 – RUSSIA: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of Russian civilization from its beginnings through the present day.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEOG/HISTORY/POLI SCI/SLAVIC 254 – EASTERN EUROPE: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of East European culture, society, politics, and literature from its beginnings to the present day.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **GEOG/AFROAMER/ANTHRO/C&E SOC/HISTORY/LACIS/ POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3–4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None

**Course Designation:** Breadth – Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEOG/AFRICAN/AFROAMER/ANTHRO/HISTORY/POLI SCI/ SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEOG 300 – WEIRD GEOGRAPHIES**

3 credits.

An opportunity to re-imagine human geography. The history of geography is particularly violent and exclusive. It is well known that systems of colonialist exploitation, theft, kidnapping, and murder were facilitated in part by the work of modern cartographers and "explorers." The discipline that we have today is a product of these earlier colonial epistemologies and ideologies. The science that emerged from these fields – geography – institutionalizes and reproduces many the ideas and viewpoints of their modern practitioners. Creates a space to re-imagine and re-invent what the field of human geography might be. Interrogates the colonial history of geography as a social science and practice. Explores several ways of thinking about space and social life that might not fit cleanly into the discipline at large.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **GEOG 301 – REVOLUTIONS AND SOCIAL CHANGE**

3 credits.

An introduction to the spatial dimensions of social movements, social struggles, and radical social change. Provides a range of critical and theoretical perspectives for reading and interpreting space as a tool of social transformation. Explores a variety of historical examples from the nineteenth century to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **GEOG 302 – ECONOMIC GEOGRAPHY: LOCATIONAL BEHAVIOR**

4 credits.

Classic location theory with modern extensions. Examination of theoretical statements and selected empirical examples. Principles of economic regionalization and network analysis with emphasis on spatial implications of the economic development process.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/URB R PL 305 – INTRODUCTION TO THE CITY**

3–4 credits.

Investigates urbanization as a general process, as well as the resulting contemporary physical, social, cultural and political- economic forms of cities. Emphasis will be placed on the history and current forms of spatial and social segregation of cities by race, class, ethnicity, and gender. The myriad ways that cities have addressed the tensions emerging from this history of spatial and social segregation will be highlighted. Further, emphasis will be placed on understanding the experiences of those most-affected by historical and continuing segregation.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG 307 – INTERNATIONAL MIGRATION, HEALTH, AND HUMAN RIGHTS**

3 credits.

Provides an introduction to health and human mobility in a global context. Mobility is part of the human condition and international law enshrines freedom of movement, yet nation-states reserve the right to exclude. Examines the development of laws and institutions governing people on the move; how these solidify or reshape existing global, racial-ethnic, class, and gender hierarchies; and how they contribute to individual and population-level health.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEOG/CHICLA/GEN&WS 308 – LATINX FEMINISMS: WOMEN'S LIVES, WORK, AND ACTIVISM**

3 credits.

An examination of Latinx women's lives, experiences, and activism through the lens of testimonio, life histories, and feminist writings rooted in social justice movements and critical pedagogies.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG/ENVIR ST 309 – PEOPLE, LAND AND FOOD: COMPARATIVE STUDY OF AGRICULTURE SYSTEMS**

3 credits.

Introduction to how and why humans have transformed natural landscapes around the world, including tropical deforestation. Exploration of different agricultural systems, and topics such as food security, land scarcity, bioenergy and the impacts of food production on the environment.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG/INTL ST 311 – THE GLOBAL GAME: SOCCER, POLITICS, AND IDENTITY**

3 credits.

Soccer (or football) is played in almost every part of the world. Soccer will be used as a lens through which to think critically about a range of issues within our own societies and around the world. This includes examining the relationship between European imperialism and the globalization of soccer in the early 20th century; thinking about who gets to play (and who gets paid) across different contexts; and analyzing how soccer is both globally networked and intensely local in its passions and rivalries. Draws from a range of perspectives on soccer, from those who consider it to be an opium for the masses to those who see it as a vehicle for positive social change, in order to illuminate some of the big questions facing the world today.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG/INTL ST 315 – UNIVERSAL BASIC INCOME: THE POLITICS BEHIND A GLOBAL MOVEMENT**

3 credits.

Should all individuals in society receive a regular transfer of cash from the state without any strings attached? If that question had been posed fifteen years ago, it would likely have been dismissed as unrealistic, undesirable, or just plain crazy. In recent years, however, the idea of introducing a universal basic income [UBI] has gained a lot of traction around the world. Growing inequalities, financial crises, fears about jobs being automated, and the COVID-19 pandemic have all helped to put UBI on the political map. But where did the idea come from? How is it traveling to different parts of the world? And on what grounds do different advocates justify their claims? Address these questions and more by exploring the history, philosophy, and political economy of UBI from a range of perspectives. Ongoing UBI experiments from different parts of the world will also be examined.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**GEOG 318 – INTRODUCTION TO GEOPOLITICS**

3 credits.

Introduction to the contemporary study of geopolitics, featuring the main concepts and research themes encountered in this field. Examine the formation of geopolitical images of the world, where these images come from, and how they have shaped our thinking and politics over time.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEOG/GEOSCI 320 – GEOMORPHOLOGY**

3 credits.

Principles and analysis of geomorphic processes and resulting land forms.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, 204,

GEOG/ENVIR ST/GEOG 120, 127 or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG/ATM OCN/ENVIR ST 322 – POLAR REGIONS AND THEIR IMPORTANCE IN THE GLOBAL ENVIRONMENT**

3 credits.

Reviews the past, present, and future of the Arctic and Antarctic regions.

Covers the history, geography, atmospheric and ocean circulations, permafrost, ice sheets, glaciers, and future state of the Arctic and Antarctica as projected by earth system models. Also explores the role of the polar regions in the earth's system and associated global climatic feedbacks.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG/ATM OCN 323 – SCIENCE OF CLIMATE CHANGE**

3 credits.

Calculus-based treatment of climate system physics and the mechanisms of modern-day anthropogenic climate change. Covers how solar radiation and rotating fluid dynamics determine the basic climate state; mechanisms of natural variability and change in climate; why anthropogenic climate change is occurring; and which scientific uncertainties are most important to estimates of 21st century change.

**Requisites:** (PHYSICS 103, 201, 207, or 247) and (MATH 217, 221, or 275).

Not open to students with credit for ATM OCN 425.

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**GEOG/GEOSCI 326 – LANDFORMS-TOPICS AND REGIONS**

3 credits.

Emphasis on natural and human processes that control the morphology of the land and its waterways.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, 204,

GEOG/ENVIR ST/GEOG 120, 127, GEOG/GEOSCI/GEOG 320, or

graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**GEOG 329 – LANDFORMS AND LANDSCAPES OF NORTH AMERICA**

3 credits.

Regional variation of landforms and physical landscapes in North America; processes and forms that give character to physiographic regions.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, 204,

GEOG/ENVIR ST/GEOG 120, 127, GEOG/GEOSCI/GEOG 320, or

graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016

**GEOG/ATM OCN/ENVIR ST 332 – GLOBAL WARMING: SCIENCE AND IMPACTS**

3 credits.

Offers a fundamental understanding of how and why global warming is happening and what to expect in the future. Investigate and discuss the evidence for change, the science that explains these observations, predicted impacts on humans and ecosystems, and the societal debate over proposed solutions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ENVIR ST 333 – GREEN URBANISM**

3 credits.

Over half of the world's population now lives in urban areas, with an expected increase of 2.5 billion people in the next 30 years. As urbanization (broadly defined as the conversion of previously undeveloped lands into urbanized uses) continues and intensifies, we are faced with a number of environmental issues, for instance, fragmentation and destruction of habitats, and decreased air and water quality. Explore how urbanization impacts ecological processes and resulting environmental outcomes, strategies for "designing with nature," and behavioral, planning, and policy responses to urban environmental problems.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ATM OCN/ENVIR ST/GEOSCI 335 – CLIMATIC ENVIRONMENTS OF THE PAST**

3 credits.

Climate change at timescales from the last several million years to the last 100 years, with emphasis on more recent timescales. Examines how climate variability arises from interplay between external forcings, feedbacks within the earth system, and (more recently) human activity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/ENVIR ST 337 – NATURE, POWER AND SOCIETY**

3 credits.

Explores the links between nature, power and society in today's world. Considers the complex relationships between humans and the earth's resources, including food, energy, physical materials, water, biota, and landscapes. Examines issues linked to population and scarcity, resource tenure, green consumerism, political economy, environmental ethics, risks and hazards, political ecology, and environmental justice.

**Requisites:** Sophomore standing. Not open to students with credit for ENVIR ST 112

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/BOTANY 338 – ENVIRONMENTAL BIOGEOGRAPHY**

3 credits.

Explores how physical and biological factors affect the distribution of terrestrial biomes, ecosystem types, and biodiversity, as well as the role of disturbance and recent human activities on differences in past and modern day species distributions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/ENVIR ST 339 – ENVIRONMENTAL CONSERVATION**

4 credits.

Examines major environmental conservation approaches in the U.S. and developing countries and how they are influenced by sociopolitical factors, cultural values and scientific understandings of nature. Historical and contemporary cases are explored with emphasis on biodiversity and climate change issues.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 340 – WORLD REGIONS IN GLOBAL CONTEXT**

3 credits.

Survey of development and change within each of the world's regions (e.g., Africa, Southeast Asia). Attention devoted to environment and society; history, economy, and demographic change; culture and politics; future challenges; key actors.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**GEOG 342 – GEOGRAPHY OF WISCONSIN**

3 credits.

Overview of the physical and human geography of Wisconsin, with an emphasis on the physical, historical, and cultural processes that shaped the Badger State.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 344 – CHANGING LANDSCAPES OF THE AMERICAN WEST**

3 credits.

Environmental change in the landscapes of the American West, in the recent past, present, and future, from the physical science background to human-environment interactions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Social Science or Natural Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOG/AMER IND/ENVIR ST 345 – MANAGING NATURE IN NATIVE NORTH AMERICA**

3 credits.

Surveys the concepts, practices, and issues associated with natural resource management in American Indian communities.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies  
requirement

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOG 348 – LATIN AMERICA**

4 credits.

A topical and historical survey of the cultural ecology and human geography of Middle America and South America.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**GEOG 349 – EUROPE**

3 credits.

A topical overview of people-environment interaction, migration, culture, urbanization, political organization and integration.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEOG 355 – AFRICA, SOUTH OF THE SAHARA**

3 credits.

Physical and human distributions and interrelationships, with emphasis on the spatial processes and patterns of modernization.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 358 – HUMAN GEOGRAPHY OF SOUTHEAST ASIA**

3 credits.

Introduction to the human geography and history of Southeast Asia, including important political and theoretical issues and policies and positionings of relevance for understanding the spatiality of the region, including the ways that ethnicity and indigeneity are playing out in Southeast Asia and among Southeast Asians in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GEOG 359 – AUSTRALIA: ENVIRONMENT AND SOCIETY**

3 credits.

An introduction to the human and environmental geography of Australia, including Australian geology, ecology, society, and culture. Topics include analysis of current events in Australia and current resource management problems using Google Earth and other tools. Australia is a settler country, the scene of indigenous genocide, a former English colony, a mythical unknown, a biophysical puzzle, home to a startling diversity of life, a cradle of modern democracy, and a powerful industrial economy with a rich resource base. It thus serves in many ways as a mirror for the US – even matching the US roughly in size, if not in population. The two countries share many elements of a common history and biogeography and yet the human and environmental geographies of the two countries have traced very different paths into the modern world.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 360 – QUANTITATIVE METHODS IN GEOGRAPHICAL ANALYSIS**

4 credits.

Application of descriptive and inferential statistics to geographical problems.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Physical Sci. Counts toward the Natural Sci req  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**GEOG 365 – GEOGRAPHICAL TRADITIONS AND PRACTICES**

3 credits.

An introduction to the breadth and practice of Geography. Introduces geographic perspectives, theories, themes, and research design. Covers the history of the discipline, applied quantitative and qualitative methodologies used in geographic research, and a selection of subfields within the discipline.

**Requisites:** Declared in Geography or Cartography and Geographic Information Systems undergraduate programs

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 370 – INTRODUCTION TO CARTOGRAPHY**

4 credits.

A broad introduction to cartography emphasizing the theory and practice of map-making. Topics include the basics in mapping (e.g., scale, spatial reference systems, projections), data acquisition, key techniques for thematic mapping, and principles of cartographic abstraction and design.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ENVIR ST/F&W ECOL/G L E/GEOSCI/LAND ARC 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**

3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG/ENVIR ST/F&W ECOL/G L E/GEOSCI/LAND ARC 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEOG/CIV ENGR/ENVIR ST 377 – AN INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS**

4 credits.

Design, implementation and use of automated procedures for storage, analysis and display of spatial information. Covers data bases, information manipulation and display techniques, software systems and management issues. Case studies.

**Requisites:** Sophomore standing, member of Engineering Guest Students, or declared in Capstone Certificate in GIS Fundamentals

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 378 – INTRODUCTION TO GEOCOMPUTING**

4 credits.

Introduction to scripting for Geographic Information Science. Geoprocessing with open-source GIS utilities. Python scripting with ArcGIS and open-source libraries.

**Requisites:** GEOG/ENVIR ST/CIV ENGR/ENVIR ST/GEOG 377 or concurrent enrollment, or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEOG 379 – GEOSPATIAL TECHNOLOGIES: DRONES, SENSORS, AND APPLICATIONS**

3 credits.

Introduction to state-of-the-art technologies that capture properties of the landscape, which is critical to better characterize and understand environmental properties and change. Develop skills in geospatial systems applicable to a variety of research and industry fields. Includes an overview of unmanned aerial systems (drones), light detection and ranging (LiDAR), high-grade Differential GPS (DGPS), Global Navigation Satellite Systems (GNSS), virtual reality, optical sensors, geocaching, and geotagging.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **GEOG 399 – INDEPENDENT STUDY**

1-3 credits.

Study under direct guidance of a faculty member. Appropriate for initial exploration of an area of scholarship in Geography through laboratory, field, or literary study.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **GEOG/AMER IND 410 – CRITICAL INDIGENOUS ECOLOGICAL KNOWLEDGES**

3 credits.

Critical Indigenous Ecological Knowledges are a set of diverse understandings, responsibilities, and laws held by distinct groups of Indigenous peoples that are enacted in multiple ways across socio-political and geographical contexts. These knowledges intersect with Indigenous political sovereignties and longstanding, complex, and nuanced relationships to the more-than-human world. Learn multiple entry points to exploring and examining these knowledge sets in the context of what's for now called the U.S. and Canada to think critically about the politics of Nature, environmentalism, race, indigeneity, and colonialism both historically and in the contemporary moment. Reflect upon how critical Indigenous knowledges about ecology, environment, and government have been erased, co-opted, criminalized, and also continually practiced, reimagined, and revitalized in multiple spheres through a range of interdisciplinary, critical, and cutting-edge Native scholarships and writings.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **GEOG/GEOSCI 420 – GLACIAL AND PLEISTOCENE GEOLOGY**

3 credits.

Principles, characteristics and work of glaciers; events of the Pleistocene. Field trip.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, GEOG/ENVIR ST/GEOG 120, 127, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **GEOG/C&E SOC/ENVIR ST 434 – PEOPLE, WILDLIFE AND LANDSCAPES**

3 credits.

Explores the relationship between humans and wildlife amid diverse landscapes, both historic and contemporary, tropical and temperate. Investigates how humans shape wild animal populations by modifying physical environments, and by hunting, domesticating and introducing species.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### **GEOG/ENVIR ST 439 – US ENVIRONMENTAL POLICY AND REGULATION**

3-4 credits.

Covers a broad cross-section of American environmental policy by focusing on specific statutes and policy arenas. Surveys the basic elements of American environmental policy and regulation with a particular focus on the specific people, sites and scales at which environmental decision-making happens through primary-source case material. Maintains a dual focus on (a) the legal and regulatory aspects of environmental regulation and (b) the specific geographic and social features of actual cases in which regulations and policy are used. Understanding environmental outcomes in a complex society depends on observing both the structure of regulations and the geographic and social context in which such regulations emerge.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/ENVIR ST/HISTORY 460 – AMERICAN ENVIRONMENTAL HISTORY**

4 credits.

Survey of interactions among people and natural environments from before European colonization to present. Equal attention to problems of ecological change, human ideas, and uses of nature and history of conservation and environmental public policy.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG/ENVIR ST/HISTORY 469 – THE MAKING OF THE AMERICAN LANDSCAPE**

4 credits.

Surveys the historical geography and environmental history of the United States by tracing the evolution of the American landscape from precolonial times to the present, with special emphasis on developing skills to interpret landscape history.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**GEOG 475 – TOPICS IN GEOGRAPHY**

1-4 credits.

Explores emerging topics in Geography.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOG 500 – QUALITATIVE STRATEGIES IN GEOGRAPHY**

3 credits.

Surveys qualitative research and methods in geography, including the human subjects review process, research ethics, preparing for fieldwork, participant observation, interviewing, focus groups, filmic experiences, archival research, participatory action research, analyzing field materials and writing styles in qualitative research.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOG 501 – SPACE AND PLACE: A GEOGRAPHY OF EXPERIENCE**

3 credits.

Explore the concepts of space and place from the perspective of learning and everyday experience. Examines how space and place emerge out of fundamental human needs, experiences, and ways of thinking.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOG/URB R PL 503 – RESEARCHING THE CITY: QUALITATIVE STRATEGIES**

3 credits.

Explores, and applies, qualitative methods in the field of urban geography. An introduction to debates around the analysis and interpretation of qualitative data is provided, grounded in concrete urban research. Participation in a three-day field course is required.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GEOG/GEN&WS 504 – FEMINIST GEOGRAPHY: THEORETICAL APPROACHES**

3 credits.

Provides an opening to some of the key debates and practices in feminist (political) geography. Feminist geography focuses on questions of power, difference, embodiment, and social change. How are feminist geographies in conversation with or part of other fields of inquiry, such as critical ethnic studies and Indigenous studies, which also focus on questions of difference, epistemologies of knowledge, and social transformation and/or decolonization? That is, what are the relationships of feminist geographic inquiry to liberatory projects of ending racism, capitalism, settler colonialism, and heteropatriarchy. Explore how feminist theories and approaches in geography transformed prevailing political geographic questions and concerns, such as power, politics, territory, boundaries, sovereignty, and violence. What do feminist principles and debates over feminist politics and methods bring to (political) geography?

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOG/URB R PL 505 – URBAN SPATIAL PATTERNS AND THEORIES**

3 credits.

Various urban empirical regularities and theories which explain them.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOG/URB R PL 506 – HISTORICAL GEOGRAPHY OF EUROPEAN URBANIZATION**

3 credits.

Historical geography of urban development in Europe from classical times to the post-World War II era, with emphasis on changes in built environment, public space and infrastructure, land use, and urban systems.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEOG 507 – WASTE GEOGRAPHIES: POLITICS, PEOPLE, AND INFRASTRUCTURES**

3 credits.

Explores waste as discarded material, a polluting and threatening substance that must be managed, and as a political object. Waste's distribution across space and among groups of people, as well as the reasons for the effects of that distribution, will be examined using geographic perspectives. Who has the ability to avoid or remove themselves from waste? Who must live and work with it? The concept of infrastructure as a set of material things (roads, trucks, boats); laws and regulations; labor relations; and economies of disposal and consumption determining waste flows unites disparate topics and case studies across the semester. Concepts of and social movements for environmental justice are recurring themes.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEOG 510 – ECONOMIC GEOGRAPHY**

4 credits.

Theoretical aspects of spatial economic distributions and locational analysis.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 511 – CRITICAL SOCIAL THEORY**

3 credits.

An introduction to many key movements and thinkers within Critical Social Theory. Explores the changing histories and presents of the field through a range of primary works from philosophy, critical theory, and geography - paying particular attention to the points where social theory intersects with problems of space and place. Covers classic problems in social theory ranging from theories of the political-economic constitution of the social (Marxism) and its extensions into the culture (the Frankfurt School) to a range of mid- to late-twentieth-century epistemological interventions framed around questions of difference and identity. Recent contestations and reformulations that have surfaced across ontological, decolonial, non-human, algorithmic, and other reimaginings and extensions of the social are examined.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEOG/GEN&WS 514 – FEMINIST GEOGRAPHY: METHODOLOGICAL APPROACHES**

3 credits.

An introduction to foundational approaches to feminist qualitative research in human geography. Research is not separate from a social world that historically has been and continues to be shaped by (settler) colonial, racialized, gendered, sexualized, and class-inflected relations of power (among others). Research practices and "findings" have been and continue to be used to inform and rationalize relations of oppression, exploitation, and violence. For feminist researchers, then, questions of power, difference, and social change are central to how we design and conduct research. Engages in political-ethical discussions about the positionality and responsibilities of ourselves as researchers, and how our knowledge production can reproduce and challenge prevailing relations of power.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GEOG 518 – POWER, PLACE, IDENTITY**

3 credits.

Advanced political geography course that explores reconceptualizations of power, place, and identity, as well as the interactive forces at work that continually reshape place-making and the inter-related processes of identification and differentiation.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020



**GEOG 523 – ADVANCED PALEOECOLOGY: SPECIES RESPONSES TO PAST ENVIRONMENTAL CHANGE**

3 credits.

Geographic and temporal responses of plant species and terrestrial ecosystems to the major environmental changes of the last 1,000,000 to 1,000 years, particularly glacial-interglacial changes in climate, carbon dioxide, and the end-Pleistocene extinctions of large animals. Key concepts include novel and no-analog ecosystems, abrupt climate and ecological change, and megaherbivore-vegetation interactions. This time period is of direct interest to global change ecologists and biogeographers studying species responses to 21st-century climate change. Hands-on practice emphasizes multivariate data analysis and quantitative paleoecological inference.

**Requisites:** Junior standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG/SOIL SCI 525 – SOIL GEOMORPHOLOGY**

3 credits.

Soil development as related to landscape throughout the Quaternary; focusing on the relationship of soils to climate and vegetation, landscape evolution, and time; principles of soil stratigraphy; case histories of soil geomorphic studies; field trips. Students should have completed one course in geomorphology to feel comfortable with the course content.

**Requisites:** SOIL SCI 325 or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG/SOIL SCI 526 – HUMAN TRANSFORMATIONS OF EARTH SURFACE PROCESSES**

3 credits.

Takes an earth systems approach to explore the role of human societies in shaping earth surface processes from local to global scales. We address how alterations to our landscapes and waterways affect biological, physical and chemical interactions among our biosphere, geosphere, hydrosphere and atmosphere. We discuss methods used to distinguish the "human impact" from background variability.

**Requisites:** Junior standing or GEOG/ENVIR ST/GEOG 120**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEOG/ATM OCN/ENVIR ST 528 – PAST CLIMATES AND CLIMATIC CHANGE**

3 credits.

Climatic change throughout geologic time, especially in the last 10 millennia; mechanisms of change, evidence, and criteria, paleogeography and paleoclimatology, climate models.

**Requisites:** Junior standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**GEOG/ENVIR ST/LAND ARC/URB R PL 532 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING**

3 credits.

Explores planning-related Geographic Information System (GIS) data, applications, analytical tools, and implementation issues.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG/ENVIR ST 534 – ENVIRONMENTAL GOVERNANCE: MARKETS, STATES AND NATURE**

3 credits.

Covers real-world questions of how the environment is managed and governed through state policy, economics, and social institutions. Includes strategies within and outside of the formal institutions of government, and extends the discussion to the commodification of nature and the use of science to understand and govern the environment. Also includes case studies of environmental governance in water, carbon, species, and urban sustainability.

**Requisites:** Sophomore standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022



**GEOG/ENVIR ST 537 – CULTURE AND ENVIRONMENT**

4 credits.

Geographic approaches to culture-nature relationships, including human perception of, use of, and adaptation to the physical environment, with emphasis on traditional subsistence systems; selected topics from contemporary and historical sources.

**Requisites:** GEOG 359, GEOG/ENVIR ST/GEOG 337, 339, 439, GEOG/ENVIR ST/AMER IND/ENVIR ST/GEOG 345, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 538 – THE HUMID TROPICS: ECOLOGY, SUBSISTENCE, AND DEVELOPMENT**

4 credits.

Description and analysis of humid-tropical ecosystems, with emphasis on the relationships, production potential, and human modification of biotic resources.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOG/ENVIR ST 557 – DEVELOPMENT AND ENVIRONMENT IN SOUTHEAST ASIA**

3 credits.

Examines the political, socio-cultural, economic and ecological aspects of contemporary development and human-environment relations in mainland Southeast Asia, applying a critical and theoretically informed perspective, and focusing largely on rural issues.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG 560 – ADVANCED QUANTITATIVE METHODS**

3 credits.

Selected topics in the analysis of spatial distributions with emphasis on multivariate techniques.

**Requisites:** Junior standing or GEOG 360

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG 565 – COLLOQUIUM FOR UNDERGRADUATE MAJORS**

3 credits.

Orientation to geography as a scholarly discipline; its development, objectives, essential concepts, methods of investigation, institutions, opportunities, problems, and trends.

**Requisites:** Declared in Geography or Cartography and Geographic Information Systems undergraduate programs

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG 566 – HISTORY OF GEOGRAPHIC THOUGHT**

3 credits.

An analysis of the development and significance of basic geographic concepts and theories. Major emphasis on concepts of place, spatial relations, landscape, and human-environment relations.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GEOG 572 – GRAPHIC DESIGN IN CARTOGRAPHY**

3-4 credits.

Study of the map as a graphic communication, the technical and perceptual aspects of its organization, symbolic coding, color and lettering.

**Requisites:** GEOG 370 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 573 – ADVANCED GEOCOMPUTING AND GEOSPATIAL BIG DATA ANALYTICS**

4 credits.

Geospatial big data is an extension of big data with an emphasis on the geospatial component. It is used to describe large volumes of georeferenced data about various aspects of the environment and society captured by millions of environmental and human sensors. An introduction to the theory, techniques, and analytical methods for geospatial big data. Methods for storing, processing, analyzing, and visualizing various types of geospatial big data using advanced Python programming will be introduced. Designed for students who have programming experience and want to reinforce their programming skills and learn AI and machine learning methods for solving geospatial big data problems.

**Requisites:** GEOG 378, COMP SCI 220, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 574 – GEOSPATIAL DATABASE DESIGN AND DEVELOPMENT**

4 credits.

Introduces the basic concepts, techniques and methodologies for designing and implementing a spatial database to prepare for professional work as a GIS designer, analyst, specialist or researcher. Design conceptual spatial database models and implement them within specific spatial data management systems (DBMS). Covers basic SQL database language and the latest developments in database systems (e.g. NoSQL database) for managing and mining spatial big data such as social media datasets and GPS trajectories.

**Requisites:** GEOG 170, GEOG 370, GEOG/CIV ENGR/ENVIR ST/ CIV ENGR/GEOG 377 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 575 – INTERACTIVE CARTOGRAPHY & GEOVISUALIZATION**

4 credits.

Examines emerging topics related to the design of user interfaces for manipulating maps, focusing on new cartographic challenges in Interactive Cartography, Geographic Visualization, and Geovisual Analytics and drawing upon relevant insight in Human-Computer Interaction, Information Visualization, and Usability Engineering.

**Requisites:** GEOG 370, 378, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 576 – GEOSPATIAL WEB AND MOBILE PROGRAMMING**

4 credits.

Covers the programming concepts and skills for understanding construction and implementation of high quality spatial web portal and mobile Apps to support geospatial data access, analysis, sharing, and synthesis over the internet. Builds on basic programming experience.

**Requisites:** (GEOG 170, GEOG 370, or GEOG/ENVIR ST/CIV ENGR/ ENVIR ST/GEOG 377) and (GEOG 378, COMP SCI 300, COMP SCI 369, or COMP SCI 400), or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 578 – GIS APPLICATIONS**

4 credits.

Application and use of GIS techniques in physical and human geography. Includes an introduction to a generic framework of GIS applications, case studies, and student projects. Cases range from urban and regional geography, to marketing geography, and to physical and environmental geography.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 579 – GIS AND SPATIAL ANALYSIS**

4 credits.

Principles and algorithms for spatial analysis in geographic information systems. A theoretical and practical examination of analytical methods used in GIS, including point, line and polygon processing, interpolation, smoothing, spatial overlay and query, network analysis, terrain analysis, and classification.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 602 – INTERNSHIP**

1-2 credits.

Individual course of study for those completing an internship.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

**GEOG 675 – SPECIAL TOPICS IN GEOGRAPHY**

3 credits.

Explores emerging topics in human and people-environment geography.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**GEOG 676 – SPECIAL TOPICS IN GEOGRAPHY**

3 credits.

Explores emerging topics in physical geography.

**Requisites:** Junior standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**GEOG 681 – SENIOR HONORS THESIS**

2-3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG 682 – SENIOR HONORS THESIS**

2-3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOG 691 – SENIOR THESIS**

2-3 credits.

Individual mentored study for seniors completing theses as arranged with a faculty member

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEOG 692 – SENIOR THESIS**

2-3 credits.

Individual mentored study for seniors completing theses as arranged with a faculty member

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GEOG 698 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**GEOG 699 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEOG 765 – GEOGRAPHICAL INQUIRY AND ANALYSIS: AN INTRODUCTION**

1 credit.

Geographic perspectives and analyses: history of the discipline, issues and research frontiers, interests and perspectives of Madison faculty, structure of graduate study in the department, research facilities and opportunities.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOG 766 – GEOGRAPHICAL INQUIRY AND ANALYSIS: TECHNIQUES**

1-3 credits.

Engaging in geographic research: analysis of successful proposals and published papers and books; different approaches to geographic research; writing of proposals for students' own research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GEOG 777 – CAPSTONE IN GIS DEVELOPMENT**

4 credits.

Covers practical and challenging cases in GIS which require programming and other GIS development skills (such as geospatial algorithm development and implementation). Cases cover the wide spectrum of GIS development projects in the GIS professions ranging from GIS data management, advanced spatial analysis, spatial database development and web/mobile programming, to cartography/geovisualization. Focuses on integration of skills from other courses into a GIS development project.

**Requisites:** GEOG 378, 572, 574, 575, 576, 579 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 778 – PRACTICUM IN GIS DEVELOPMENT**

4 credits.

Develop the ability to conceive and manage a real-world GIS development project, and to design a plan for solving the project.

**Requisites:** GEOG 378, 572, 574, 575, 576, 579 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOG 799 – INDEPENDENT READING**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**GEOG 900 – SEMINAR IN GEOGRAPHY**

1-3 credits.

Surveys recent and classic works in geography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**GEOG 901 – SEMINAR IN CULTURAL GEOGRAPHY**

2-3 credits.

Surveys recent and classic works in cultural and human geography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GEOG 918 – SEMINAR IN POLITICAL GEOGRAPHY**

2-3 credits.

Surveys recent and classic works in political geography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**GEOG 920 – SEMINAR IN PHYSICAL GEOGRAPHY**

1-3 credits.

Surveys recent and classic works in physical geography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOG 930 – SEMINAR IN PEOPLE-ENVIRONMENT GEOGRAPHY**

2-3 credits.

Surveys recent and classic works in people-environment geography.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOG/HISTORY 932 – SEMINAR IN AMERICAN ENVIRONMENTAL HISTORY**

3 credits.

Surveys recent and classic works on American environmental history to introduce students to the methods and historiography of the field.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**GEOG/AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/ F&W ECOL/ZOOLOGY 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOG 970 – SEMINAR IN GEOGRAPHIC INFORMATION SCIENCE**

1-3 credits.

Surveys recent and classic works in cartography and geographic information science.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOG/ATM OCN/BOTANY/ENVIR ST/F&W ECOL/GEOSCI/ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**GEOG/A A E/ANTHRO/C&E SOC/HISTORY/LACIS/POLI SCI/PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GEOG/AFRICAN/ANTHRO/ECON/HISTORY/POLI SCI 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**GEOG 990 – RESEARCH AND THESIS**

1-9 credits.

Individual mentored study for completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOG 999 – INDEPENDENT WORK**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOLOGICAL ENGINEERING (GLE)****G L E 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career in industry.

**Requisites:** Sophomore standing

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**G L E 171 – INTRODUCTION TO GEOLOGICAL ENGINEERING**

1 credit.

Comprehensive introduction to engineering applications of earth sciences. Exploitation and management of geologic resources; mitigation of geologic hazards such as landslides and earthquakes; abatement of environmental problems such as land and water pollution; design of surface and underground excavations; principal methods of geological engineering.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**G L E/CIV ENGR 291 – PROBLEM SOLVING USING COMPUTER TOOLS**

4 credits.

Introduction to engineering computations with emphasis on computer tools and computer based measurement, data collection, and processing. Tools will include computer aided drafting, spreadsheets, other engineering computation tools, and hardware and software for laboratory and spatial measurements.

**Requisites:** MATH 222, 276, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/CIV ENGR 330 – SOIL MECHANICS**

3 credits.

Basic principles of soil mechanics and fundamentals of application in engineering practice; soil composition and texture; classification; permeability and seepage; consolidation; settlement; shear strength; lateral earth pressures and retaining structures, shallow and deep foundations, slope stability; subsurface exploration; laboratory characterization of physical and engineering properties of soils.

**Requisites:** E M A 303 or M E 306, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/GEOSCI 350 – INTRODUCTION TO GEOPHYSICS: THE DYNAMIC EARTH**

3 credits.

Methods of geophysics applied to earth structure and plate tectonics. Principles of seismology, gravity, geodesy, magnetism and heat flow.

**Requisites:** MATH 217, 221, 275, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/GEOSCI 360 – PRINCIPLES OF MINERALOGY**

3 credits.

Minerals, their physical and chemical properties, crystallography, and geologic significance.

**Requisites:** (GEOSCI 100 or GEOSCI/ENVIR ST/GEOSCI 106) and (CHEM 103, 109, 115, or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/GEOSCI 370 – ELEMENTARY PETROLOGY**

3 credits.

Igneous and metamorphic rocks, studied in hand sample and thin section.

**Requisites:** GEOSCI/G L E/GEOSCI 360, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/ENVIR ST/F&W ECOL/GEOG/GEOSCI/LAND ARC 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**

3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/ENVIR ST/F&W ECOL/GEOG/GEOSCI/LAND ARC 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**G L E 401 – SPECIAL TOPICS IN GEOLOGICAL ENGINEERING**

1-3 credits.

Various topics in the field of geological engineering.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**G L E/CIV ENGR 421 – ENVIRONMENTAL SUSTAINABILITY ENGINEERING**

3 credits.

Uses the three paradigms of sustainability (environmental, social, and economic) for strategic environmental initiatives in an engineering setting. Proactive environmental management opportunities, including practices of pollution prevention, industrial ecology, and design for the environment. A systems approach to manufacturing, examining the life cycle of products, incorporating total cost accounting, extended producer responsibility, and design for end-of-life.

**Requisites:** (MATH 217, 221, or 275) and (CHEM 104 or 109), or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**G L E/CIV ENGR 430 – INTRODUCTION TO SLOPE STABILITY AND EARTH RETENTION**

1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/GEOSCI 431 – SEDIMENTARY & STRATIGRAPHY LAB**

1 credit.

Covers Sedimentology and Stratigraphy; emphasizes qualitative and quantitative description and interpretation of sediments and sedimentary deposits.

**Requisites:** GEOSCI 204 or GEOSCI/G L E/GEOSCI 360, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/CIV ENGR 432 – INTRODUCTION TO SHALLOW AND DEEP FOUNDATION SYSTEMS**

1 credit.

Introduction to theory and approaches commonly used in geotechnical engineering practice for design and analysis of slopes and earth retaining structures.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/CIV ENGR 434 – INTRODUCTION TO UNDERGROUND OPENINGS ENGINEERING**

1 credit.

Subsurface stress; rock failure criteria; openings in competent rock; openings in layered rocks; plastic behavior around openings in weak rock; stereographic projections and stereonet; block theory; rock bolts; stabilization methods and design.

**Requisites:** G L E/CIV ENGR/G L E 330, G L E/M S E/CIV ENGR/GEOSCI/CIV ENGR/G L E/M S & E 474 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/CIV ENGR/ENVIR ST/GEOSCI 444 – PRACTICAL APPLICATIONS OF GPS SURVEYING**

2 credits.

Global positioning system surveying for field applications. Signals. Coordinate systems. Datums. Cartographic projections. Satellite orbits. Choosing hardware. Strategies for data collection and analysis. Assessing uncertainty. Geocoding satellite images. Integrating data with Geographic Information Systems. Emerging technologies.

**Requisites:** MATH 211, 217, 221, 275, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/GEOSCI 455 – STRUCTURAL GEOLOGY**

4 credits.

Principles of rock deformation, structures in layered rocks, structural analysis, intrusive structures. Lab: three-dimensional problems involving structural concepts; field trip.

**Requisites:** GEOSCI 202, 204, and (GEOSCI/G L E/GEOSCI 370 or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/CIV ENGR/GEOSCI/M S & E 474 – ROCK MECHANICS**

3 credits.

Classification of rock masses, stress and strain in rock, linear and non-linear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications.

**Requisites:** E M A 201, PHYSICS 201, 207, or 247, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E 479 – GEOLOGICAL ENGINEERING DESIGN**

4 credits.

A practical problem in an area of geological engineering (such as development of a geologic resource or design of a structure in soil and/or rock) is selected, and then the principles and processes of design and analysis are applied to the solution of the problem.

**Requisites:** Senior standing and G L E/CIV ENGR/G L E 421, 530, 532, 635, 735, G L E/GEOSCI/G L E 629, CIV ENGR 414, 514, or (G L E/CIV ENGR/G L E 430, 432, and 434)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**G L E/CIV ENGR 511 – MIXING AND TRANSPORT IN THE ENVIRONMENT**

3 credits.

Application of fluid mechanics to understand the mixing and transport of contaminants, pollutants, and other solutes in the environment.

Introduction to chemical and biochemical transformation processes as well as boundary interactions at the air-water and sediment-water interfaces.

Transport phenomena: diffusive processes, advective processes, turbulent diffusion, and shear flow dispersion. Introduction to both analytical and computational solutions with applications to mixing and transport in rivers, lakes, the atmosphere, and coastal waters.

**Requisites:** (CIV ENGR/G L E 291, COMP SCI 220, or E C E 203) and (CIV ENGR 310 or M E 363), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**G L E/CIV ENGR 520 – REACTIVE PROCESSES FOR SUSTAINABLE ENERGY AND RESOURCE PRODUCTION**

3 credits.

Key scientific concepts related to fossil and renewable energy resources.

Apply the fundamentals of thermodynamics and chemical kinetics at solid interfaces to better understand the science behind using fossil and renewable energy resources. Evaluate the impacts of existing and emerging energy technologies on the environment.

**Requisites:** Senior standing, (MATH 211, 217, 221, or 275), (CHEM 103, 104, or 109), and CIV ENGR 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**G L E/CIV ENGR 530 – SEEPAGE AND SLOPES**

3 credits.

Practical aspects of seepage effects and ground water flow. Stability of natural and man-made slopes under various loading conditions. Design and construction of earth dams and embankments. Flow net and its use; wells; filters; total and effective stress methods of slope analysis; selection of pertinent soil parameters.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**G L E/CIV ENGR 532 – FOUNDATIONS**

3 credits.

Shallow and deep foundations. Analysis and design of footings, mats, piers and piles, and related fill and excavation operations. Consolidation settlement, time rate of settlement, stress distribution, elastic (immediate) settlement, load bearing capacity; methods to reduce settlements and increase shear strength; the selection of a foundation system.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/CIV ENGR 535 – WIND ENERGY BALANCE-OF-PLANT DESIGN**

3 credits.

Wind Energy Development and Balance-of-Plant Design. Up-front coverage includes the science and mechanics of wind energy including turbine basics, wind resource assessment, energy production, and economic return. Balance-of-plant design aspects include site layout and micro-siting, foundation systems, collector systems and interconnection, site civil and electrical infrastructure, and structural tower analysis. Development includes environmental due diligence and permitting, stakeholder engagement, energy policy and markets, and levelized cost of energy (LCOE).

**Requisites:** PHYSICS 201, 207, 247, E M A 201, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**G L E/GEOSCI 537 – QUANTITATIVE METHODS FOR GEOSCIENCE**

3 credits.

MATLAB is a powerful, high-level programming language and integrated development environment (IDE) that is used across a broad variety of scientific disciplines for tasks including data visualization, modeling, and application development. Focus on the active use of MATLAB for developing practical programming and data analysis skills that can be applied across a range of geoscience- relevant problems. Applications will include: data visualization and publishable figure development; automation of data processing; statistical and time-series analysis; image processing and mapping; and optimization. Additional topics may be guided by student interest.

**Requisites:** MATH 222, 276, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**G L E/GEOSCI 594 – INTRODUCTION TO APPLIED GEOPHYSICS**

3 credits.

Survey of applied geophysics, including seismic refraction, seismic reflection, electrical resistivity, gravity, and magnetics methods. Basic physics of each method and modeling techniques and field procedures.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, 248, or E M A 202), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/GEOSCI 595 – FIELD METHODS IN APPLIED AND ENGINEERING GEOPHYSICS**

1 credit.

The application of geophysical field methods for delineating near-surface features and/or structures as applied to engineering, environmental and exploration problems.

**Requisites:** G L E/GEOSCI/G L E 594 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/GEOSCI 596 – GEOMECHANICS**

3 credits.

Observation, description, and prediction of deformation of geomechanical systems at depth, and the forces (stress) causing those deformations, relevant for petroleum/geothermal reservoirs and studies of earthquake mechanics. Emphasis on computational exercises using datasets from the petroleum industry and earthquake catalogues, as well as prediction of ground deformation.

**Requisites:** G L E/M S E/CIV ENGR/GEOSCI/CIV ENGR/G L E/M S & E 474, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/CIV ENGR 612 – ECOHYDROLOGY**

3 credits.

Mutual interactions between the hydrologic cycle and ecosystems, including hydrologic mechanisms that underlie ecological patterns and processes, movement of water and energy through the soil-plant-atmosphere continuum, application and development of models for simulating ecohydrologic processes, and case studies on ecohydrologic function and ecosystem services of varied environments.

**Requisites:** CIV ENGR 311, G L E/GEOSCI/G L E 627, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**G L E/GEOSCI 627 – HYDROGEOLOGY**

3-4 credits.

Mathematical treatment of the physical principles governing the flow of groundwater; emphasis on well hydraulics and flow system analysis.

**Requisites:** (GEOSCI 100, 109, 110, GEOSCI/ATM OCN/GEOSCI 105, 140, GEOSCI/ENVIR ST/GEOSCI 106, or GEOSCI/ASTRON/GEOSCI 160) and (MATH 217, 221, or 275), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**G L E/GEOSCI 629 – CONTAMINANT HYDROGEOLOGY**

3 credits.

Physical and chemical processes governing the transport of solutes in groundwater; application of hydrogeologic and geochemical theory and practice to the protection of aquifers from contamination.

**Requisites:** GEOSCI/G L E/GEOSCI 627 and (MATH 222 or 276), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E/CIV ENGR 635 – REMEDIATION GEOTECHNICS**

3 credits.

Geotechnical practice for remediation of sites containing contaminated soil and groundwater is discussed. Topics include non-invasive and invasive subsurface exploration techniques, methods to monitor for the presence of contaminants in the saturated and unsaturated zones, and geotechnically-oriented remedial action technologies.

**Requisites:** G L E/CIV ENGR/G L E 330, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**G L E 699 – INDEPENDENT STUDY**

1-3 credits.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**G L E/GEOSCI 724 – GROUNDWATER FLOW MODELING**

3 credits.

An introduction to the principles of modeling groundwater flow systems, with emphasis on regional flow system analysis. Conceptual understanding of governing equations, and the use of finite difference techniques to solve such equations are stressed. Develop codes and become introduced to packaged models, including those developed by the U. S. Geological Survey. Knowledge of hydrogeology [such as G L E/GEOSCI 627 or 629] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**G L E/CIV ENGR 730 – ENGINEERING PROPERTIES OF SOILS**

3 credits.

Determination and interpretation of soil properties for engineering purposes; physio-chemical properties of soil-water systems, permeability and capillarity, compression characteristics of soils, measurement of soil properties in the triaxial test, properties of frozen soils and permafrost.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**G L E/CIV ENGR 732 – UNSATURATED SOIL GEOENGINEERING**

3 credits.

Engineering principles of unsaturated soils as they apply to geotechnical and geoenvironmental systems. Effect of soil water suction and stress on hydraulic conductivity, shear strength, and compressibility of soils in the context of geoenvironmental problems of flow and stability. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**G L E/CIV ENGR 733 – PHYSICOCHEMICAL BASIS OF SOIL BEHAVIOR**

3 credits.

Applications of physiochemical, mineralogical and environmental considerations to the engineering behavior of soils. Soil composition, formation, fabric, pore fluid chemistry and interaction of phases. The particulate nature of soils and the fabric-engineering property (volume change, strength, deformation and conduction) relationships. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**G L E/CIV ENGR 735 – SOIL DYNAMICS**

3 credits.

Geotechnical considerations of earthquake engineering and foundation vibrations. Seismic surveying; ground motion during earthquakes; determination of soil properties for ground response analysis; dynamic properties of soils; soil structure interaction effects; soil liquefaction; dynamic analysis of earth dams; settlements resulting from earthquakes, lateral earth pressures during earthquakes; foundation vibrations. Knowledge of Soil Mechanics [such as CIV ENGR/G L E 330] and Foundations [such as G L E 452 or CIV ENGR/G L E 532] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**G L E/GEOSCI 747 – TECTONOPHYSICS**

3 credits.

Elasticity and flexure of the earth's lithosphere, heat conduction, mantle convection, earthquake mechanisms, rock rheology, and fluid migration in the earth's crust; integration of geophysical observations, laboratory experiments, and theoretical models.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**G L E/GEOSCI 757 – ADVANCED ROCK MECHANICS**

3 credits.

Experimental rock mechanics, rock mechanics apparatus design, static and dynamic rock friction, rate and state friction, crack phenomena and rock fracture mechanics, earthquake energy budget, elastic/viscoelastic/plastic behavior of rocks, engineering and geological applications. Knowledge of introductory rock mechanics [such as M S E/GEOSCI/CIV ENGR/G L E/ M S & E 474] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021

**G L E 790 – MASTER'S RESEARCH OR THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Geological Engineering MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**G L E 801 – SPECIAL TOPICS IN GEOLOGICAL ENGINEERING**

1-3 credits.

Topics vary.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**G L E 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Geological Engineering PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**G L E 900 – SEMINAR**

1 credit.

Topics vary.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**G L E 990 – RESEARCH AND THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Geological Engineering PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**G L E 999 – INDEPENDENT WORK**

1-3 credits.

Under faculty supervision.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEOSCIENCE (GEOSCI)****GEOSCI 100 – INTRODUCTORY GEOLOGY: HOW THE EARTH WORKS**

3 credits.

Geologic processes; structure and history of the earth; earthquakes, volcanos, glaciers, groundwater, minerals, rocks, deserts, fossils; topographic and geologic maps; climate change on geologic and human time scales.

**Requisites:** Not open to students with credit for ENVIR ST/GEOSCI/ ENVIR ST 106**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/ATM OCN/ENVIR ST 102 – CLIMATE AND CLIMATE CHANGE**

3 credits.

Describes the basic climate principles governing the climate system. It describes the climate and climate variability at present, climate evolution in the past, and the projected climate change into the future. The scientific principles underlying the natural and anthropogenic greenhouse effect and climate model forecasts are elucidated.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**GEOSCI/ATM OCN 105 – SURVEY OF OCEANOGRAPHY**

3-4 credits.

Nature and behavior of ocean water, interaction of oceans and atmosphere, structure of the ocean floor, life in the oceans, our relationship to the marine environment.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**GEOSCI/ENVIR ST 106 – ENVIRONMENTAL GEOLOGY**

3 credits.

Application of geology to problems resulting from the ever more intense use of the earth and its resources.

**Requisites:** Not open to students with credit for GEOSCI 100

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 109 – THREE BILLION YEARS BENEATH YOUR FEET: GEOLOGY OF THE NATIONAL PARKS**

3 credits.

Famously called "America's best idea", the National Parks of the US record two-thirds of Earth's history, from the most ancient mountains to active volcanic eruptions. The geologic story of the National Parks is explored in the framework of physiography, tectonics, time, and fundamental geologic processes, highlighting the major parks from Hawaii, to Alaska, to the conterminous US. Provides a view of the geological evolution of the Earth using specific examples.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 110 – EVOLUTION AND EXTINCTION**

4 credits.

Contemporary views of the origin and diversification of life and evolutionary processes; crises in the history of life, with emphasis on controversies regarding evolution, mass extinctions, and the co-evolution of Earth and life.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 111 – VOLCANOES AND CIVILIZATION**

1 credit.

An introduction to the impact and influence volcanoes have had on the evolution of the Earth, life, human civilizations, and modern society.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**GEOSCI 112 – MOUNTAINS AND MOVING PLATES**

1 credit.

An introduction to the Earth's great mountain ranges, the processes that lead to their births and deaths, and the reasons why continental mountain ranges differ dramatically from oceanic mountains and mountains on other planets.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**GEOSCI 115 – SCIENCE BEHIND THE NEWS - THE WORLD AROUND US**

1-2 credits.

Examines the earth and environmental science behind the news with the goal of producing more informed and knowledgeable citizens.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**GEOSCI 117 – EX-FILES: LIFE IN THE EARTH'S EXTREME ENVIRONMENT**

2 credits.

Explores the diversity of microbial life forms in modern and ancient geological environments, with a focus on extreme environments of geological origin or relevance. Includes exploration of unusual aspects of microbial life in everyday settings.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 118 – EYE IN THE SKY: MONITORING THE EARTH BY SATELLITE**

1 credit.

Fundamentals of satellite imagery applied to the earth sciences. Basics of image interpretation. Multitemporal data. Resolution and uncertainty. Existing and emerging technologies. Orbits, wavelengths, and satellites. Socio-economic impact of remotely-sensed data.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**GEOSCI/ATM OCN 140 – NATURAL HAZARDS AND DISASTERS**

3 credits.

An exploration of the science behind natural disasters including earthquakes, tsunamis, volcanic eruptions, landslides, tornadoes, hurricanes, and floods. Why, where, and when do these events occur, and why are some predictable but others are not? Addresses hazard assessment, forecasting, and mitigation to lessen their impact on society.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/ASTRON 160 – LIFE IN THE UNIVERSE**

2 credits.

An examination of the origin and evolution of life in the universe based on our knowledge of astronomy, biology, and geology. Includes discussions on the search for extraterrestrial life and the history of life in our solar system.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI 198 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2012**GEOSCI 199 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GEOSCI 202 – INTRODUCTION TO GEOLOGIC STRUCTURES**

4 credits.

Introduction to recognition and mapping of geologic structures in the field. Landforms, folds, faults, tectonics, geologic maps, and field instrumentation.

**Requisites:** GEOSCI 100 or GEOSCI/ENVIR ST/GEOSCI 106**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOSCI 204 – GEOLOGIC EVOLUTION OF THE EARTH**

4 credits.

Physical evolution of the earth and its relationship to the development of life through geologic time. Includes field trip.

**Requisites:** GEOSCI 100 or GEOSCI/ENVIR ST/GEOSCI 106**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI 304 – GEOBIOLOGY**

3 credits.

An integrative approach to studying the interaction between the atmosphere, hydrosphere, biosphere, and geosphere as they have evolved during earth history. Overarching theme includes ocean-climate system changes, biogeochemical cycles, evolution from microbes to mammals, and critical events in life history.

**Requisites:** GEOSCI 204 or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOSCI/GEOG 320 – GEOMORPHOLOGY**

3 credits.

Principles and analysis of geomorphic processes and resulting land forms.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, 204, GEOG/ENVIR ST/GEOG 120, 127 or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/GEOG 326 – LANDFORMS-TOPICS AND REGIONS**

3 credits.

Emphasis on natural and human processes that control the morphology of the land and its waterways.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, 204, GEOG/ENVIR ST/GEOG 120, 127, GEOG/GEOSCI/GEOG 320, or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016

**GEOSCI 331 – GEMS: THE SCIENCE BEHIND THE SPARKLE**

1-2 credits.

Explores the formation, collection, properties, and treatment of many popular gemstones.

**Requisites:** Junior standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI/ATM OCN/ENVIR ST/GEOG 335 – CLIMATIC ENVIRONMENTS OF THE PAST**

3 credits.

Climate change at timescales from the last several million years to the last 100 years, with emphasis on more recent timescales. Examines how climate variability arises from interplay between external forcings, feedbacks within the earth system, and (more recently) human activity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI/G L E 350 – INTRODUCTION TO GEOPHYSICS: THE DYNAMIC EARTH**

3 credits.

Methods of geophysics applied to earth structure and plate tectonics. Principles of seismology, gravity, geodesy, magnetism and heat flow.

**Requisites:** MATH 217, 221, 275, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI/G L E 360 – PRINCIPLES OF MINERALOGY**

3 credits.

Minerals, their physical and chemical properties, crystallography, and geologic significance.

**Requisites:** (GEOSCI 100 or GEOSCI/ENVIR ST/GEOSCI 106) and (CHEM 103, 109, 115, or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI/G L E 370 – ELEMENTARY PETROLOGY**

3 credits.

Igneous and metamorphic rocks, studied in hand sample and thin section.

**Requisites:** GEOSCI/G L E/GEOSCI 360, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI/ENVIR ST/F&W ECOL/G L E/GEOG/LAND ARC 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**

3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI/ENVIR ST/F&W ECOL/G L E/GEOG/LAND ARC 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**GEOSCI 375 – PRINCIPLES OF GEOCHEMISTRY**

3 credits.

Provides a chemical basis for understanding the origin, evolution, distribution and interactions of chemical elements and isotopes between the lithosphere, hydrosphere, biosphere, and atmosphere in geological and environmental processes.

**Requisites:** GEOSCI/G L E/GEOSCI 360, (CHEM 109, 104, or 115) and GEOSCI/G L E/GEOSCI 370 or concurrent enrollment in GEOSCI/G L E/GEOSCI 370, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOSCI 376 – TOPICS IN GEOLOGY**

1-3 credits.

Special topics or discussions of recent research in Geoscience.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GEOSCI 402 – RESEARCH AND COMMUNICATION IN THE GEOLOGICAL SCIENCES**

3 credits.

Skills and strategies to conduct research in the geological sciences, including collection of data, analysis of the data, generation of models to explain the data, and clear communication of both the research process and results. As part of the research process, find, evaluate, and utilize information in the existing scientific literature. Practice effective scientific communication skills, including writing, oral presentations, and producing effective visualizations.

**Requisites:** Senior standing and declared in Geology and Geophysics**Course Designation:** Gen Ed - Communication Part B

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**GEOSCI/ENVIR ST 411 – ENERGY RESOURCES**

3 credits.

A critical examination of the full spectrum of renewable and nonrenewable energy options, from the unifying perspective of the Earth systems that govern their use. Energy conversion and efficiency, consumption patterns and trends, and environmental consequences of energy production and use.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/GEOG 420 – GLACIAL AND PLEISTOCENE GEOLOGY**

3 credits.

Principles, characteristics and work of glaciers; events of the Pleistocene. Field trip.

**Requisites:** ENVIR ST/GEOSCI/ENVIR ST 106, GEOSCI 100, 109, GEOG/ENVIR ST/GEOG 120, 127, or graduate/professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI 430 – SEDIMENTOLOGY AND STRATIGRAPHY**

3 credits.

Comprehensive survey of the processes and products of sedimentation, including depositional environments, sedimentary tectonics, sequence stratigraphic principles, and analytical methods.

**Requisites:** GEOSCI 204 and GEOSCI/G L E/GEOSCI 370, or graduate/professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/G L E 431 – SEDIMENTARY & STRATIGRAPHY LAB**

1 credit.

Covers Sedimentology and Stratigraphy; emphasizes qualitative and quantitative description and interpretation of sediments and sedimentary deposits.

**Requisites:** GEOSCI 204 or GEOSCI/G L E/GEOSCI 360, graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOSCI/CIV ENGR/ENVIR ST/G L E 444 – PRACTICAL APPLICATIONS OF GPS SURVEYING**

2 credits.

Global positioning system surveying for field applications. Signals. Coordinate systems. Datums. Cartographic projections. Satellite orbits. Choosing hardware. Strategies for data collection and analysis. Assessing uncertainty. Geocoding satellite images. Integrating data with Geographic Information Systems. Emerging technologies.

**Requisites:** MATH 211, 217, 221, 275, or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/G L E 455 – STRUCTURAL GEOLOGY**

4 credits.

Principles of rock deformation, structures in layered rocks, structural analysis, intrusive structures. Lab: three-dimensional problems involving structural concepts; field trip.

**Requisites:** GEOSCI 202, 204, and (GEOSCI/G L E/GEOSCI 370 or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**GEOSCI 456 – GEOLOGIC FIELD METHODS**

2 credits.

Theory and techniques of geologic mapping; field trips.

**Requisites:** GEOSCI/G L E/GEOSCI 455 or concurrent enrollment**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**GEOSCI 457 – CONDUCTED FIELD TRIP**

2 credits.

Study of the principles and methods of geologic mapping.

**Requisites:** GEOSCI/G L E/GEOSCI 370 or concurrent enrollment**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**GEOSCI 459 – FIELD GEOLOGY**

6 credits.

Detailed geologic mapping and solution of related problems in the field.

**Requisites:** GEOSCI 202, GEOSCI/G L E/GEOSCI 370, and 455**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2019**GEOSCI/CIV ENGR/G L E/M S & E 474 – ROCK MECHANICS**

3 credits.

Classification of rock masses, stress and strain in rock, linear and non-linear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications.

**Requisites:** E M A 201, PHYSICS 201, 207, or 247, or graduate/

professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI/HIST SCI 514 – HISTORY OF GEOLOGIC THOUGHT**

3 credits.

Major concepts from earliest to modern times.

**Requisites:** GEOSCI 204 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**GEOSCI 515 – PRINCIPLES OF ECONOMIC GEOLOGY**

4 credits.

Composition, structure, occurrence, origin, and economic investigation of important groups of mineral deposits; problems of mineral deposition.

**Requisites:** GEOSCI 204 and GEOSCI/G L E/GEOSCI 370, or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**GEOSCI/G L E 537 – QUANTITATIVE METHODS FOR GEOSCIENCE**

3 credits.

MATLAB is a powerful, high-level programming language and integrated development environment (IDE) that is used across a broad variety of scientific disciplines for tasks including data visualization, modeling, and application development. Focus on the active use of MATLAB for developing practical programming and data analysis skills that can be applied across a range of geoscience-relevant problems. Applications will include: data visualization and publishable figure development; automation of data processing; statistical and time-series analysis; image processing and mapping; and optimization. Additional topics may be guided by student interest.

**Requisites:** MATH 222, 276, graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEOSCI/ZOOLOGY 541 – PALEOBIOLOGY**

3 credits.

The evolutionary process as interpreted from the fossil record. Topics include: the study of form; tempo and mode of evolution; levels and mechanisms of evolutionary change; extinction in the fossil record; trends and patterns in the history of life; macroevolution.

**Requisites:** GEOSCI 304, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016

**GEOSCI/ZOOLOGY 542 – INVERTEBRATE PALEONTOLOGY**

3 credits.

The evolutionary history, morphology, and ecology of fossil invertebrates. Labs emphasize fossil identification and recognition of basic morphological features.

**Requisites:** (GEOSCI 110 or 204), (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing.

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**GEOSCI 551 – PALEOCEANOGRAPHY**

3 credits.

Investigates the history of the Earth's oceans, focusing on the last 65 million years, with discussion of the chemical and physical methods through which oceans are studied and the role of oceans in the climate system.

**Requisites:** GEOSCI 100, 110, GEOSCI/ATM OCN/GEOSCI 105, GEOSCI/ENVIR ST/GEOSCI 106, or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GEOSCI 556 – MOUNTAIN BELTS**

3 credits.

Examination of interaction of tectonic plates and the resulting structures.

**Requisites:** GEOSCI/G L E/GEOSCI 455 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 557 – STRUCTURAL PETROLOGY**

3 credits.

Petrographic investigation of rock fabrics and deformation using thin sections. Use of petrographic microscopes and Scanning Electron Microscopes (SEMs).

**Requisites:** GEOSCI/G L E/GEOSCI 370 and 455, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GEOSCI/G L E 594 – INTRODUCTION TO APPLIED GEOPHYSICS**

3 credits.

Survey of applied geophysics, including seismic refraction, seismic reflection, electrical resistivity, gravity, and magnetics methods. Basic physics of each method and modeling techniques and field procedures.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, 248, or E M A 202), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI/G L E 595 – FIELD METHODS IN APPLIED AND ENGINEERING GEOPHYSICS**

1 credit.

The application of geophysical field methods for delineating near-surface features and/or structures as applied to engineering, environmental and exploration problems.

**Requisites:** G L E/GEOSCI/G L E 594 or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI/G L E 596 – GEOMECHANICS**

3 credits.

Observation, description, and prediction of deformation of geomechanical systems at depth, and the forces (stress) causing those deformations, relevant for petroleum/geothermal reservoirs and studies of earthquake mechanics. Emphasis on computational exercises using datasets from the petroleum industry and earthquake catalogues, as well as prediction of ground deformation.

**Requisites:** G L E/M S E/CIV ENGR/GEOSCI/CIV ENGR/G L E/M S & E 474, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**GEOSCI 610 – GEOCHRONOLOGY, TIMESCALES, AND RATES OF GEOLOGIC PROCESSES**

3 credits.

Application of radioisotopic (Ar-Ar, U-Pb, U-Th, U-He) and cosmogenic (He, Ne, Cl, Be, C) dating methods. Status of geologic, astronomic and paleomagnetic timescales, Chronology of flood basalts, impacts, extinctions, glaciations. Constraints on rates of magmatism, mountain uplift, deformation, erosion, sedimentation.

**Requisites:** GEOSCI/G L E/GEOSCI 370 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOSCI/G L E 627 – HYDROGEOLOGY**

3-4 credits.

Mathematical treatment of the physical principles governing the flow of groundwater; emphasis on well hydraulics and flow system analysis.

**Requisites:** (GEOSCI 100, 109, 110, GEOSCI/ATM OCN/GEOSCI 105, 140, GEOSCI/ENVIR ST/GEOSCI 106, or GEOSCI/ASTRON/GEOSCI 160) and (MATH 217, 221, or 275), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI/G L E 629 – CONTAMINANT HYDROGEOLOGY**

3 credits.

Physical and chemical processes governing the transport of solutes in groundwater; application of hydrogeologic and geochemical theory and practice to the protection of aquifers from contamination.

**Requisites:** GEOSCI/G L E/GEOSCI 627 and (MATH 222 or 276), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 691 – SENIOR THESIS**

3-4 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 692 – SENIOR THESIS**

3-4 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOSCI 698 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**GEOSCI 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**GEOSCI 701 – QUANTITATIVE GEOMORPHOLOGY**

4 credits.

Quantitative study of processes that shape Earth's surface. Use theory and field observations to investigate major components of continental geomorphic systems, including hillslopes, rivers, and glaciers. Understand how the major factors that shape Earth's surface—tectonics, climate, and life—create the landscapes we observe.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOSCI 720 – GLACIOLOGY**

3 credits.

Addresses the fundamentals of glaciology and glacier landform mechanics: mass balance, ice deformation, basal slip, temperature structure, glacial hydrology, sediment deformation and deposition, and landform building processes. Emphasizes an understanding of the mathematical principles that dictate how glaciers function. Begins with a classical treatment of the mechanics of glaciers and moves onto fundamental advances in the field of glaciology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**GEOSCI/G L E 724 – GROUNDWATER FLOW MODELING**

3 credits.

An introduction to the principles of modeling groundwater flow systems, with emphasis on regional flow system analysis. Conceptual understanding of governing equations, and the use of finite difference techniques to solve such equations are stressed. Develop codes and become introduced to packaged models, including those developed by the U. S. Geological Survey. Knowledge of hydrogeology [such as G L E/GEOSCI 627 or 629] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GEOSCI 727 – ADVANCED HYDROGEOLOGY**

1-3 credits.

Advanced topics in Hydrogeology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**GEOSCI 729 – FIELD APPLICATIONS IN HYDROGEOLOGY**

2 credits.

Instruction and practice in instrumentation and techniques used in collection and interpretation of data. Includes field work in and around Madison.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2015**GEOSCI 731 – CARBONATE GEOLOGY**

2 credits.

Comprehensive survey of the processes and products of carbonate sedimentation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**GEOSCI 732 – GEOCHEMISTRY OF SEDIMENTS**

3 credits.

Processes involved in the origin of chemical sediments; shales, carbonates, and evaporites.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**GEOSCI 740 – MICROPALAEONTOLOGY I**

3 credits.

Microscopic fossils; conodonts, foraminifera, and ostracodes in particular; their biology, ecology, evolution, and stratigraphic distribution.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2014**GEOSCI/G L E 747 – TECTONOPHYSICS**

3 credits.

Elasticity and flexure of the earth's lithosphere, heat conduction, mantle convection, earthquake mechanisms, rock rheology, and fluid migration in the earth's crust; integration of geophysical observations, laboratory experiments, and theoretical models.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GEOSCI/ATM OCN/ENVIR ST/ZOOLOGY 750 – PROBLEMS IN OCEANOGRAPHY**

3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 755 – ADVANCED STRUCTURAL GEOLOGY**

3 credits.

Structures in layered, intrusive, and metamorphic rocks; structural analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOSCI/G L E 757 – ADVANCED ROCK MECHANICS**

3 credits.

Experimental rock mechanics, rock mechanics apparatus design, static and dynamic rock friction, rate and state friction, crack phenomena and rock fracture mechanics, earthquake energy budget, elastic/viscoelastic/plastic behavior of rocks, engineering and geological applications. Knowledge of introductory rock mechanics [such as M S E/GEOSCI/CIV ENGR/G L E/ M S & E 474] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOSCI 758 – MECHANICS OF EARTHQUAKES AND FAULTING**

3 credits.

Addresses current topics and controversies on fault mechanics, earthquake physics, and the rock record of seismicity. Emphasizes critical reading and in-depth discussion of recent publications drawn from a variety of disciplines, including geophysical, geological, and geochemical studies and approaches.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**GEOSCI 765 – CRYSTAL CHEMISTRY**

3 credits.

Principles of crystal chemistry, emphasizing the structure and behavior of rock forming minerals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**GEOSCI 771 – IGNEOUS PETROLOGY**

3 credits.

Classification, characteristics, and petrogenesis of igneous rocks. Representative rock suites studied in lab.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GEOSCI 777 – ELECTRON MICROPROBE ANALYSIS**

3 credits.

Proper use and functioning of electron probe and SEM, their use in microanalysis (WDS, EDS), range of applications, and limitations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 793 – GEOPHYSICAL INVERSE THEORY**

3 credits.

Application of inverse methods to geophysical measurements of the structure of the earth.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GEOSCI 796 – PHYSICS OF THE EARTH II**

3 credits.

Theory and observations of earthquakes, seismic waves and plate tectonics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GEOSCI 875 – ADVANCED TOPICS IN GEOLOGY**

1-3 credits.

Special topics in Geoscience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GEOSCI/ATM OCN/BOTANY/CIV ENGR/ENVIR ST/ZOOLOGY 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### GEOSCI 920 – SEMINAR IN GLACIAL AND PLEISTOCENE GEOLOGY

1-3 credits.

An exploration of modern glacial, glaciology, and Pleistocene geology literature. Includes a field trip to explore local glacial geology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### GEOSCI 929 – SEMINAR-HYDROGEOLOGY

1-2 credits.

Special topics in Hydrogeology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### GEOSCI 940 – SEMINAR IN PALEONTOLOGY

1 credit.

Review of published literature on how patterns of biotic evolution and extinction are preserved in the fossil record, with particular emphasis on mass extinction events and the biological consequences of abrupt climate change.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

### GEOSCI 970 – SEMINAR-GEOCHEMISTRY

2 credits.

Exploration of topics in the field of Geochemistry with an emphasis on engagement with recent literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### GEOSCI/ATM OCN/BOTANY/ENVIR ST/F&W ECOL/GEOG/ZOOLOGY 980 – EARTH SYSTEM SCIENCE SEMINAR

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

### GEOSCI 990 – RESEARCH

1-12 credits.

Research supervised by individual faculty members.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### GEOSCI 991 – SEMINAR: GEOPHYSICS

1-3 credits.

Topics in geophysics, emphasizing current research comparing models, experiments, and data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

### GEOSCI 999 – ADVANCED INDEPENDENT READING

1-3 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

## GERMAN (GERMAN)

### GERMAN 101 – FIRST SEMESTER GERMAN

4 credits.

Emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### GERMAN 102 – SECOND SEMESTER GERMAN

4 credits.

Emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** GERMAN 101 or placement into GERMAN 102

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 111 – FIRST SEMESTER DUTCH**

4 credits.

Emphasis on proficiency in Dutch through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 112 – SECOND SEMESTER DUTCH**

4 credits.

Emphasis on proficiency in Dutch through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** GERMAN 111

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 203 – THIRD SEMESTER GERMAN**

4 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** GERMAN 102 or placement into GERMAN 203

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 204 – FOURTH SEMESTER GERMAN**

4 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concerted vocabulary expansion, and intensive practice.

**Requisites:** GERMAN 203 or placement into GERMAN 204

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 213 – THIRD SEMESTER DUTCH**

4 credits.

Review of Dutch grammar and continuation of systematic vocabulary development.

**Requisites:** GERMAN 112

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 214 – FOURTH SEMESTER DUTCH**

4 credits.

Review of Dutch grammar and continuation of systematic vocabulary development.

**Requisites:** GERMAN 213

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 235 – DUTCH CONVERSATION AND COMPOSITION**

3 credits.

A review of Dutch grammar and vocabulary and intensive development of writing and speaking skills in Dutch. Provides a strong linguistic preparation for study in a Dutch-speaking university.

**Requisites:** GERMAN 214

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**GERMAN 236 – BASCOM COURSE**

3 credits.

Developing skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GERMAN 245 – TOPICS IN DUTCH LIFE AND CULTURE**

3 credits.

Cultural history and traditions of Dutch speaking countries. All readings and lectures in English.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GERMAN 249 – INTERMEDIATE GERMAN - SPEAKING AND LISTENING**

3 credits.

Drawing mainly on contemporary audio and video materials from German-speaking countries, deepen understanding of German as a spoken language by learning how native speakers vary their use of sound structures, vocabulary, and grammar according to speech situation.

**Requisites:** GERMAN 204 or placement into GERMAN 249, 258, or 262

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 258 – INTERMEDIATE GERMAN-READING**

3 credits.

Develop reading skills by working with literary and cultural texts from 1800 to the present. Emphasizes close reading, textual analysis, historical context, and the use of appropriate reading strategies.

**Requisites:** GERMAN 204 or placement into GERMAN 249, 258, or 262

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frgn Lang - 5th + semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 262 – INTERMEDIATE GERMAN-WRITING**

3 credits.

Individual and collaborative writing as well as teacher- and student-guided writing activities. Writings rely on authentic text models, many with German-specific cultural connotations.

**Requisites:** GERMAN 204 or placement into GERMAN 249, 258, or 262

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 264 – CULTURE IN 20TH CENTURY BERLIN**

3 credits.

In the twentieth century, Berlin functioned as the seat of government and as a showcase for conflicting ideologies during the Cold War, and it now faces the challenge of returning to its function as reunified Germany's capital without ignoring its past. Through it all, Berlin has maintained a reputation as a center for artistic experimentation and a mecca for alternative culture. Examine the various arts and forms of entertainment from the turn of the century through the Weimar Republic, the Third Reich, the Cold War, and the reunification, in an effort to determine how politics, economics, and demographics have come together to shape a unique Berlin culture.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GERMAN 266 – TOPICS IN GERMAN AND/OR YIDDISH CULTURE**

3 credits.

Introduction to diverse cultural expressions of German and/or Yiddish speakers worldwide.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**GERMAN 267 – YIDDISH SONG AND THE JEWISH EXPERIENCE**

3-4 credits.

Explores Yiddish song as an expression of the modern Jewish experience from Eastern Europe to the US. Covers folk song, popular and art music. Music and readings together provide an analytical framework to examine cultural and historical issues.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN/JEWISH/LITTRANS 269 – YIDDISH LITERATURE AND CULTURE IN EUROPE**

3 credits.

Exploration of European Yiddish fiction, poetry, folklore, and cinema, with a focus on works of the 19th and 20th centuries.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GERMAN 271 – THE GERMAN IMMIGRATION EXPERIENCE**

3 credits.

Surveys experiences through the centuries of America's German-speaking immigrants, including their situations in Europe, their reasons for leaving, and their successes and difficulties in their new home. Historical, sociological, linguistic, cultural, and other aspects will be considered.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**GERMAN 272 – NAZI CULTURE**

3 credits.

Examines how ideology and new policies influenced cultural life in the Third Reich. Topics include propaganda and entertainment films, music, literature and theater, visual arts and architecture, youth education, and consumer culture specifically in its appeal to women.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 275 – KAFKA AND THE KAFKAESQUE**

3 credits.

Examines a wide selection of texts by Franz Kafka to approach an understanding of his universe and prepare ourselves to view this universe in comparison with other contemporary authors as well as authors from other cultures and eras (A. Camus, W. G. Sebald, T. Pynchon, H. Mulisch, P. Roth, H. Murakami). Also highlights literature, film, and art works in the tradition of the Kafkaesque.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN/LITTRANS 276 – SPECIAL TOPICS IN GERMAN AND WORLD LITERATURE/S**

3 credits.

Exploration of diverse world literary traditions with an emphasis on German and German speaking cultures.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 278 – TOPICS IN GERMAN CULTURE**

3 credits.

Introduction to German-speaking cultures. Topics may include Weimar culture, Nazi culture, Berlin, fin-de-siecle Vienna, minorities, representatives of the Holocaust, Germanic mythology, East Germany, Germans in America. Readings and lectures in English.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GERMAN/JEWISH/LITTRANS 279 – YIDDISH LITERATURE AND CULTURE IN AMERICA**

3 credits.

Exploration of American Yiddish poetry, fiction, theater, and cinema created by European Jews in the United States.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN/LITTRANS 280 – FROM GRIMM TO GRYFFINDOR: GERMAN FAIRYTALES (RE)IMAGINED**

3 credits.

From Rumpelstiltskin to Rapunzel, the rich fairy-tale tradition of the German-speaking world is filled with familiar themes and subversive morals. With an eye to depictions of gender, gender roles, sexuality, and race, we critically engage with these tales and contextualize them within the social and political landscapes that shaped them.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**GERMAN 285 – INTERMEDIATE INTENSIVE (HONORS) GERMAN: LANGUAGE, CULTURE, TEXTS**

6 credits.

Intensive introduction to German-language culture and texts of varying length and genre, emphasizing reading, writing, and discussion skills. Equivalent to GERMAN 258 and 262.

**Requisites:** GERMAN 204. Not open to students with credit for GERMAN 258 or 262.**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frng Lang - 5th + semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN 298 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**GERMAN 299 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022



**GERMAN 305 – LITERATUR DES 20. UND 21. JAHRHUNDERTS**

3-4 credits.

Overview of new and recent literature in German within its historical and cultural contexts using a variety of genres and cultural artifacts, including fiction, drama, poetry, film, and popular songs.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GERMAN 311 – FIRST SEMESTER DUTCH FOR GRADUATE STUDENTS**

3 credits.

Acquire a minimal communication level of proficiency in Dutch through listening, speaking, reading, and writing.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 312 – SECOND SEMESTER DUTCH FOR GRADUATE STUDENTS**

3 credits.

Acquire a minimal communication level of proficiency in Dutch through listening, speaking, reading, and writing.

**Requisites:** GERMAN 311

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 313 – THIRD SEMESTER DUTCH FOR GRADUATE STUDENTS**

3 credits.

A review of Dutch grammar and vocabulary development. Reading and discussion of newspaper articles and modern short stories.

**Requisites:** GERMAN 312

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 314 – FOURTH SEMESTER DUTCH FOR GRADUATE STUDENTS**

3 credits.

Reading and discussion of texts dealing with the cultural history of the Netherlands and Flanders as well as samples of modern Dutch fiction.

**Requisites:** GERMAN 313

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 325 – TOPICS IN DUTCH LITERATURE**

3 credits.

Study of an author or theme in modern Dutch/Flemish literature, presented by the current Dutch/Flemish writer in residence.

**Requisites:** GERMAN 214

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GERMAN 335 – DUTCH CONVERSATION AND COMPOSITION**

3 credits.

A review of Dutch Grammar and vocabulary and intensive development of writing and speaking skills. Provides a strong linguistic preparation for study in a Dutch-speaking university. Taught in Dutch.

**Requisites:** GERMAN 314

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**GERMAN 337 – ADVANCED COMPOSITION & CONVERSATION**

3-4 credits.

Enhances speaking, reading, listening, and writing skills within a range of situations; uses a variety of texts to cover current topics in German society, develop essay strategies, improve vocabulary, and review advanced grammar topics.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Fall 2022

**GERMAN 351 – INTRODUCTION TO GERMAN LINGUISTICS**

3-4 credits.

Understanding the German language in its historical development and its contemporary manifestations, using English as a point of reference.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 352 – TOPICS IN GERMAN LINGUISTICS**

3-4 credits.

Hands-on introduction to a topic in German language study. Topics are designed for future teachers of German and those interested in graduate study in German philology/linguistics.

**Requisites:** GERMAN 351

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GERMAN 362 – TOPICS IN GERMAN LITERATURE**

3-4 credits.

Selected topics in the literature of German-speaking countries.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 367 – STUDY ABROAD IN GERMAN LITERATURE**

2-5 credits.

Treatment of a topic in German literature in a course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**GERMAN 368 – STUDY ABROAD IN GERMAN CULTURE**

2-5 credits.

Treatment of a topic in German culture in a course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**GERMAN 369 – STUDY ABROAD IN GERMAN LINGUISTICS**

2-5 credits.

Treatment of a topic in German linguistics in a course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2001**GERMAN 372 – TOPICS IN GERMAN CULTURE**

3-4 credits.

Selected topics in the culture of German-speaking countries.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 377 – STUDY ABROAD IN DUTCH LITERATURE**

2-5 credits.

Treatment of a topic in Dutch literature in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**GERMAN 378 – STUDY ABROAD IN DUTCH CULTURE**

2-5 credits.

Treatment of a topic in Dutch culture in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**GERMAN 379 – STUDY ABROAD IN DUTCH LINGUISTICS**

2-5 credits.

Treatment of a topic in Dutch linguistics in a course offered at a university outside the United States. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**GERMAN 385 – HONORS SEMINAR IN GERMAN LITERATURE**

3 credits.

Selected topics in the literature of German-speaking countries.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285) and Declared in an Honors program**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 391 – GERMAN FOR GRADUATE READING KNOWLEDGE I**

3 credits.

Intensive grammar and reading.

**Requisites:** Senior standing**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**GERMAN 392 – GERMAN FOR GRADUATE READING KNOWLEDGE II**

3 credits.

Intensive grammar and reading.

**Requisites:** GERMAN 391**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN 401 – FIRST-SEMESTER GERMAN FOR GRADUATE STUDENTS**

3 credits.

Emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GERMAN 402 – SECOND-SEMESTER GERMAN FOR GRADUATE STUDENTS**

3 credits.

Emphasis on proficiency in German through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** GERMAN 401**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GERMAN 403 – THIRD-SEMESTER GERMAN FOR GRADUATE STUDENTS**

3 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concentered vocabulary expansion, and intensive practice.

**Requisites:** GERMAN 402**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN 404 – FOURTH-SEMESTER GERMAN FOR GRADUATE STUDENTS**

3 credits.

Four-skills approach (speaking, listening, writing, reading) centered around authentic texts, recordings, and images. Grammar review, concentered vocabulary expansion, and intensive practice.

**Requisites:** GERMAN 403**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GERMAN 411 – KULTUR DES 20. UND 21. JAHRHUNDERTS**

3-4 credits.

Analyzes the German-speaking world in the 20th and 21st centuries using variety of authors, films, music, and other art media. Works include literary and historical texts, central texts from German sociologists, and art history.

**Requisites:** (GERMAN 249, 258, and 262) or (GERMAN 249 and 285)**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GERMAN 445 – TOPICS IN DUTCH CULTURE**

3-4 credits.

Topic in Dutch-language cultures.

**Requisites:** GERMAN 214**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**GERMAN/JEWISH 510 – GERMAN-JEWISH CULTURE SINCE THE 18TH CENTURY**

3 credits.

Investigates German-Jewish culture since the 18th century, concentrating on toleration, emancipation, acculturation, assimilation, anti-Semitism, and Bildung.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**GERMAN 560 – TOPICS IN GERMAN STUDIES**

3 credits.

Topics will vary. Each seminar will focus on a topic in German Studies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**GERMAN 612 – GERMAN LITERARY MOVEMENTS SINCE 1750**

3 credits.

Ideas and theories of literary movements exemplified in selected primary and secondary literature.

**Requisites:** GERMAN 305, 285, or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021

**GERMAN 625 – LETTERKUNDE DER LAGE LANDEN**

3-4 credits.

Topics vary. May include: medieval literature; Golden Age literature; texts from Europe, South Africa, Indonesia, the Caribbean; memory in post-war literature; women writers; twentieth-century movements; Dutch-Jewish literature. Taught primarily in Dutch.

**Requisites:** GERMAN 314**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GERMAN 632 – A THEME IN GERMAN LITERATURE**

3 credits.

Explore German literary, philosophical and aesthetic questions, and the interplay of German music and theater, art and literature, philosophy and science, art and architecture.

**Requisites:** GERMAN 305, 285, or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**GERMAN 644 – THEORY AND PRACTICE OF GERMAN DRAMA**

3 credits.

German dramatic theory, interpretation of German drama, practice of dramatic elocution and performance.

**Requisites:** GERMAN 385 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**GERMAN 645 – CULTUURKUNDE DER LAGE LANDEN**

3-4 credits.

Theory and analysis of such topics as: construction of Dutch and Belgian identities; medieval culture; the Dutch Revolt and Golden Age; colonialism, anti-colonialism, post-colonialism; immigration and emigration; Dutch and Flemish regionalism vis-a-vis Europeanization and globalization. Taught primarily in Dutch.

**Requisites:** GERMAN 314**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 650 – HISTORY OF THE GERMAN LANGUAGE**

3 credits.

Overview of the history of the German language; basic methodological and bibliographical training necessary for work in German philology/linguistics and the older Germanic languages.

**Requisites:** Senior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**GERMAN/MEDIEVAL 651 – INTRODUCTION TO MIDDLE HIGH GERMAN**

3 credits.

Middle High German grammar and vocabulary with the goals of fluency and accuracy in reading medieval texts. Covers topics in phonology, morphology, syntax, and lexicon.

**Requisites:** (GERMAN 249, 258, and 262), (GERMAN 249 and 285), or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**GERMAN/COM ARTS 655 – GERMAN FILM**

3 credits.

Important filmmakers from 1910 to the present; their relation to German cultural and social history of the period.

**Requisites:** GERMAN 305, 337, 351, 362, 372, 385, or COM ARTS 350**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**GERMAN 676 – ADVANCED SEMINAR IN GERMAN STUDIES**

3 credits.

Focuses on a topic in German studies.

**Requisites:** Senior standing and GERMAN 337**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**GERMAN 677 – SEMINAR IN GERMAN CULTURE STUDIES**

3 credits.

Analyze texts of a specific period of German cultural history (e.g., the Romantic era, the Baroque).

**Requisites:** GERMAN 411

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**GERMAN 681 – SENIOR HONORS THESIS-FIRST SEMESTER**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GERMAN 682 – SENIOR HONORS THESIS-SECOND SEMESTER**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**GERMAN 683 – SENIOR HONORS SEMINAR IN GERMAN LITERATURE**

3 credits.

Focuses on a topic in German studies.

**Requisites:** GERMAN 385 and Declared in an Honors program

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GERMAN 698 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**GERMAN 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GERMAN 720 – COLLEGE TEACHING OF GERMAN**

1 credit.

Discuss German-language specific instruction. Emphasis on teaching German and developing identity as a language instructor.

**Requisites:** Declared in German MA or PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 722 – THEORY OF TEACHING GERMAN**

2 credits.

Theory and methodology of teaching German as a second language.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 723 – PRACTICUM IN TEACHING UNDERGRADUATE LITERATURE**

1-2 credits.

Observation and discussion of undergraduate literature course. Consideration of pedagogical issues and limited opportunity for practice teaching.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GERMAN 724 – PRACTICUM IN TEACHING UNDERGRADUATE LINGUISTICS**

1-2 credits.

Observation and discussion of undergraduate linguistics course. Consideration of pedagogical issues and limited opportunity for practice teaching.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GERMAN 725 – PRACTICUM IN TEACHING UNDERGRADUATE CULTURE**

1-2 credits.

Observation and discussion of undergraduate culture course.  
Consideration of pedagogical issues and limited opportunity for practice teaching.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN 727 – TOPICS IN APPLIED LINGUISTICS**

3 credits.

Selected issues in language acquisition and language teaching.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 742 – TOPICS IN GERMAN CULTURAL STUDIES**

3 credits.

Selected topics in German culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**GERMAN/MEDIEVAL 755 – OLD GERMANIC LANGUAGES**

3 credits.

Old High German, Old Saxon, and Gothic on a rotating basis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 758 – TOPICS IN CONTEMPORARY GERMAN**

3 credits.

Topics in contemporary German culture, literature, and linguistics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GERMAN 768 – COMPARATIVE AND HISTORICAL GRAMMAR OF THE OLD GERMANIC LANGUAGES**

3 credits.

General characteristics of the Old Germanic languages, especially in phonology; methods of reconstruction.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**GERMAN 799 – INDEPENDENT STUDY**

1-6 credits.

Advanced study under guidance.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN/FRENCH/HISTORY/POLI SCI/SOC 804 – INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**GERMAN 947 – SEMINAR IN GERMAN LITERATURE AND CULTURE**

3 credits.

Cultivate a deep knowledge and appreciation of German literature and German intellectual history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**GERMAN 960 – SEMINAR IN GERMAN LINGUISTICS**

3 credits.

Topic from a core area of linguistics, with integrated discussion of methodological approaches; bibliographical skills; basics of linguistic scholarship.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**GERMAN 970 – ADVANCED SEMINAR IN GERMAN LINGUISTICS**

3 credits.

Cultivate a deep knowledge and discussion of German linguistics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**GERMAN 990 – INDIVIDUAL RESEARCH IN LITERATURE**

1-9 credits.

Independent research and writing under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



### GERMAN 991 – INDIVIDUAL RESEARCH LINGUISTICS AND GERMANIC PHILOLOGY

1-9 credits.

Independent research and writing on the subject of linguistics and philology under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## GERMAN, NORDIC, AND SLAVIC (GNS)

### GNS/JEWISH 105 – FIRST SEMESTER YIDDISH

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### GNS/JEWISH 106 – SECOND SEMESTER YIDDISH

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context.

**Requisites:** JEWISH/GNS/JEWISH 105

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### GNS/FOLKLORE 200 – FOLKLORE OF CENTRAL, EASTERN AND NORTHERN EUROPE

3 credits.

Folklore of Central, Eastern and Northern Europe and among emigrants from these regions in North America. A survey of genres of folklore, history of research, and modes of interpretation, past and present.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### GNS/ENVIR ST 210 – CULTURES OF SUSTAINABILITY: CENTRAL, EASTERN, AND NORTHERN EUROPE

3 credits.

Exploration of the ideals and realities of sustainability in Central, Northern and East European contexts. Cultural, historical, environmental and other perspectives on sustainability on a local and global scale.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### GNS/HISTORY 265 – AN INTRODUCTION TO CENTRAL ASIA: FROM THE SILK ROUTE TO AFGHANISTAN

3 credits.

Examination of human geography, ethnicity, nomadism and pastoralism, oases cultures, religion and international politics of the silk routes of central Asia. Not open to students with credit for HIST 265 prior to Fall 2018.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### GNS 270 – INTRODUCTORY TOPICS IN GNS

3 credits.

Elementary topics in German, Nordic, and/or Slavic culture, folklore, linguistics, and/or language.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### GNS 324 – LITERATURES OF CENTRAL ASIA

3 credits.

Critical survey of the development of medieval and modern literatures of the peoples of Central Asia from pre-Islamic times to the present with selected readings in English translation. Not open to students with credit for LCA 314 prior to fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GNS 329 – ELEMENTARY SUMMER IMMERSION TURKISH**

8 credits.

Provides students with an introduction to the Turkish language, which is spoken by more than 80 million people in Turkey and Europe. Work within four language skills: listening, reading, writing, and speaking. Provides to communicate in more extended situations in Turkish. Information on holidays, traditions and colloquial phrases will be introduced. Besides everyday Turkish, learn written Turkish such as formal letters, orders and messages. Pays special attention to reading and writing and to vocabulary expansion.

**Requisites:** Declared in Turkish Flagship Language Initiative

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2018

**GNS 331 – FIRST SEMESTER KAZAKH**

4 credits.

Provides an introduction to the Kazakh language, which is a Turkic language spoken by about 11 million people in Kazakhstan, China, Mongolia, Turkey, Uzbekistan, Tajikistan, Turkmenistan, Russia, and Iran. Work within four language skills: listening, reading, writing, and speaking. Learn to communicate in Kazakh in authentic situations. Kazakh will be used as the primary language in classroom instructions, with minimal use of English for explanations of grammar.

**Requisites:** None

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GNS 332 – SECOND SEMESTER KAZAKH**

4 credits.

Building on skills learned in first semester Kazakh, learn to communicate in more extended situations. Information on holidays, traditions and colloquial phrases will be introduced. Pays special attention to reading and writing and to vocabulary expansion.

**Requisites:** GNS 331 (or LCA LANG 331 prior to fall 2018)

**Course Designation:** Frgn Lang – 2nd semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GNS 339 – FIRST SEMESTER TURKISH**

4 credits.

Provides an introduction to the Turkish language, which is spoken by more than 80 million people in Turkey and Europe. Work within four language skills: listening, reading, writing, and speaking. Learn to communicate in Turkish in authentic situations. Turkish will be used as the primary language in classroom instructions, with minimal use of English.

**Requisites:** None

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GNS 340 – SECOND SEMESTER TURKISH**

4 credits.

Building on skills learned in first semester Turkish, learn to communicate in more extended situations. Information on holidays, traditions and colloquial phrases will be introduced. Besides everyday Turkish, learn written Turkish such as formal letters, orders and messages. Pays special attention to reading and writing and to vocabulary expansion.

**Requisites:** GNS 339 (or LCA LANG 339 prior to fall 2018)

**Course Designation:** Frgn Lang – 2nd semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GNS 351 – FIRST SEMESTER CENTRAL EURASIAN LANGUAGE**

4 credits.

Introductory study of a Central Eurasian study, including introductory grammar to read, write and speak about daily life and interactions in the topic language. Upon completion, student can expect to possess a firm grammatical foundation for further study of oral and written Tajik, Uyghur, or Uzbek.

**Requisites:** Declared in Central Eurasian Studies Summer Institute

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**GNS 352 – SECOND SEMESTER CENTRAL EURASIAN LANGUAGE**

4 credits.

Introductory study of a Central Eurasian study, including introductory grammar to read, write and speak about daily life and interactions in the topic language. Upon completion, student can expect to possess a firm grammatical foundation for further study of oral and written Tajik, Uyghur, or Uzbek.

**Requisites:** Declared in Central Eurasian Studies Summer Institute

**Course Designation:** Frgn Lang – 2nd semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**GNS 370 – TOPICS IN GNS (INTERMEDIATE)**

3 credits.

Intermediate topics in German, Nordic, and/or Slavic culture, folklore, linguistics, and/or language.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GNS 375 – PHILOSOPHY, THEORY, CRITICISM**

3 credits.

Selected studies in critical theory, continental philosophy, and/or literary criticism; topics may include German idealism, psychoanalysis, phenomenology, linguistics, Marxism, gender theory, critical race studies, religion, translation, poetics, media, migration studies, etc.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**GNS/JEWISH 405 – FIRST SEMESTER YIDDISH FOR GRADUATE STUDENTS**

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context. Includes tasks designed to facilitate Yiddish-related research.

**Requisites:** Graduate/professional standing**Repeatable for Credit:** No**GNS 429 – INTERMEDIATE SUMMER IMMERSION TURKISH**

8 credits.

Continues the study of the Turkish language with an emphasis on four language skills: listening, reading, writing, and speaking in order to develop proficiency at the intermediate level. Improve communication in Turkish. Instruction will emphasize the language that is relevant to situations that students are likely to encounter if they travel to or live in Turkey. The secondary goal of the course is to improve students' understanding of Turkish society and culture. Students are deeply engaged in Turkish culture through history, literature, art and politics.

**Requisites:** GNS 329 or 340 and declared in Turkish Flagship Language Initiative**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2019**GNS 431 – THIRD SEMESTER KAZAKH**

4 credits.

Continues the study of the Kazakh language with an emphasis on four language skills: listening, reading, writing, and speaking in order to develop proficiency at the intermediate level. The primary goal is to improve communication in Kazakh. Instruction will emphasize the language that is relevant to situations that students are likely to encounter if they travel to or live in Kazakhstan. The secondary goal of the course is to improve students' understanding of Kazakh society and culture.

**Requisites:** GNS 332 (or LCA LANG 332 prior to fall 2018)**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**GNS 432 – FOURTH SEMESTER KAZAKH**

4 credits.

Continue to learn more about the Kazakh language through history, literature and art, in order to better understand its cultural codes.

**Requisites:** GNS 431 (or LCA LANG 431 prior to fall 2018)**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**GNS 439 – THIRD SEMESTER TURKISH**

4 credits.

Continues the study of the Turkish language, focusing on four language skills--listening, reading, writing, and speaking--in order to develop proficiency at the intermediate level. Improve communication in Turkish. Instruction will emphasize the language that is relevant to situations that students are likely to encounter if they travel to or live in Turkey. The secondary goal of the course is to improve students' understanding of Turkish society and culture.

**Requisites:** GNS 340 (or LCA LANG 340 prior to fall 2018)**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**GNS 440 – FOURTH SEMESTER TURKISH**

4 credits.

Continues the study of the Turkish language, focusing on four language skills--listening, reading, writing, and speaking--in order to develop proficiency at the intermediate level. In addition to the topics covered in previous semesters, learn more about the language through history, literature and art, in order to better understand its cultural codes.

**Requisites:** GNS 439 (or LCA LANG 439 prior to fall 2018)**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**GNS 451 – THIRD SEMESTER CENTRAL EURASIAN LANGUAGE**

4 credits.

Third semester level language taught in an intensive 8-week summer language program.

**Requisites:** Declared in Central Eurasian Studies Summer Institute**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022

**GNS 452 – FOURTH SEMESTER CENTRAL EURASIAN LANGUAGE**  
4 credits.

Introduces intermediate-level communication skills in Central Eurasian languages in varying settings. Students will learn a wide range of vocabulary, grammar structure and pragmatic usage in situated dialogues. They will improve four language skills (listening, speaking, reading and writing) and pragmatic competence through interactive and meaningful in-class activities and after-class assignments.

**Requisites:** Declared in Central Eurasian Studies Summer Institute

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**GNS 460 – READINGS IN TURKISH: CONTEMPORARY TURKEY THROUGH LITERATURE AND MEDIA**  
4 credits.

Improve reading skills in Turkish by also developing and employing analytical skills to comprehend, identify and respond to salient features of the contemporary Turkish society. Acquire skills to comprehend a variety of texts within Turkey's social and political framework. Designed for students participating in the Turkish Overseas Flagship Program.

**Requisites:** GNS 429

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GNS 471 – ADVANCED TOPICS IN EAST EUROPEAN AND CENTRAL ASIAN LANGUAGES AND CULTURES**  
1-4 credits.

Advanced topics in East European and Central Asian culture, folklore, linguistics, and/or language.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GNS 529 – ADVANCED SUMMER IMMERSION TURKISH**  
8 credits.

Continues the study of the Turkish language with an emphasis on four language skills: listening, reading, writing, and speaking in order to develop proficiency at the advanced level. Improve communication in Turkish. Instruction will emphasize the language that is relevant to situations that students are likely to encounter if they travel to or live in Turkey. The secondary goal of the course is to improve students' understanding of Turkish society and culture. Students are deeply engaged in Turkish culture through history, literature, art and politics.

**Requisites:** GNS 429 or GNS 440 and declared in Turkish Flagship Language Initiative

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

**GNS 531 – FIFTH SEMESTER KAZAKH**  
3-4 credits.

Enhance speaking, listening, writing and reading skills. Build confidence in speaking about issues related to daily life.

**Requisites:** GNS 432 (or LCA LANG 432 prior to fall 2018)

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GNS 532 – SIXTH SEMESTER KAZAKH**  
3-4 credits.

Enhance speaking, listening, writing and reading skills. Build confidence in speaking about issues related to daily life.

**Requisites:** GNS 531 (or LCA LANG 531 prior to fall 2018)

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**GNS 539 – FIFTH SEMESTER TURKISH AND AZERI**  
3-4 credits.

Continues the study of the Turkish languages combined with Azerbaijani, which is a Turkic language closely related to Turkish. Learn Azerbaijani written in the Latin alphabet and its minor differences from Turkish. Develop proficiency at the advanced level in listening, speaking, reading and writing in Turkish and in Azerbaijani.

**Requisites:** GNS 440 (or LCA LANG 440 prior to fall 2018)

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GNS 540 – SIXTH SEMESTER TURKISH AND AZERI**  
3-4 credits.

A continuation of the study of Turkish language with Azerbaijani. Practice in understanding and employing Turkish at an advanced level, including spoken and written language in colloquial and professional modes. Analysis and interpretation of texts from a grammatical and cultural perspective.

**Requisites:** GNS 539 (or LCA LANG 539 prior to Fall 2018)

**Course Designation:** Breadth - Humanities

Frng Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GNS 551 – FIFTH SEMESTER CENTRAL EURASIAN LANGUAGE**

4 credits.

Introduces advanced-level communication skills in Central Eurasian languages in varying settings. Students will learn a wide range of vocabulary, grammar structure and pragmatic usage in situated dialogues. They will improve four language skills (listening, speaking, reading and writing) and pragmatic competence through interactive and meaningful in-class activities and after-class assignments.

**Requisites:** Declared in Central Eurasian Studies Summer Institute

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**GNS 552 – SIXTH SEMESTER CENTRAL EURASIAN LANGUAGE**

4 credits.

Introduces advanced-level communication skills in Central Eurasian languages in varying settings. Students will learn a wide range of vocabulary, grammar structure and pragmatic usage in situated dialogues. They will improve four language skills (listening, speaking, reading and writing) and pragmatic competence through interactive and meaningful in-class activities and after-class assignments.

**Requisites:** Declared in Central Eurasian Studies Summer Institute

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**GNS 624 – PROSEMINAR IN CENTRAL ASIAN HISTORY**

3 credits.

Introduction to the historiography of the Golden Horde and the Tatar, Kazak, and Uzbek nations; impact on Russia; Russian colonialism in Central Asia; innovative approaches to social and economic history. Not open to students with credit for LCA 640 prior to Fall 2019

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**GNS 700 – GRADUATE SEMINAR IN PROFESSIONAL DEVELOPMENT**

3 credits.

Promotes the academic and professional development of graduate students in the humanities, in particular in the fields of German, Scandinavian, and Slavic studies. Students create and critique conference presentations, grant proposals, books reviews, CVs, and other important academic documents. The seminar includes visits from faculty in the various programs of German, Nordic, and Slavic.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GREEK (CLASSICS) (GREEK)****GREEK 103 – FIRST SEMESTER ANCIENT GREEK**

4 credits.

An introduction to ancient Greek grammar and the development of basic reading skills.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GREEK 104 – SECOND SEMESTER ANCIENT GREEK**

4 credits.

An introduction to ancient Greek grammar and the development of basic reading skills.

**Requisites:** GREEK 103

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GREEK 303 – FIRST SEMESTER ANCIENT GREEK**

4 credits.

An introduction to ancient Greek grammar and the development of basic reading skills.

**Requisites:** Graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GREEK 304 – SECOND SEMESTER ANCIENT GREEK**

4 credits.

An introduction to ancient Greek grammar and the development of basic reading skills.

**Requisites:** GREEK 303

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GREEK 305 – THIRD SEMESTER ANCIENT GREEK**

3 credits.

Selections from Plato's Dialogues, the New Testament, Homer's Iliad, or Herodotus.

**Requisites:** GREEK 104, 304, or graduate/professional standing

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**GREEK 306 – FOURTH SEMESTER ANCIENT GREEK**

3 credits.

Selections from Plato's Dialogues, the New Testament, Homer's Iliad, or Herodotus.

**Requisites:** GREEK 305 or graduate/professional standing

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GREEK 401 – READINGS IN GREEK LITERATURE**

3 credits.

Selected readings in ancient Greek poetry or prose.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frgn Lang - 5th + semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**GREEK 505 – ELEMENTARY PROSE COMPOSITION**

3 credits.

The study of Greek grammar and style through composition.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**GREEK 510 – HOMER**

3 credits.

Extensive reading in both Iliad and Odyssey.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**GREEK 511 – HESIOD**

3 credits.

The writings of Hesiod in Greek.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**GREEK 512 – GREEK LYRIC POETS**

3 credits.

The complete corpus of Alcman, Ibycus, Stesichorus, Sappho, Alcaeus, Corinna, Anacreon, Praxilla, and Simonides. Selections from Bacchylides and Pindar.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**GREEK 520 – GREEK COMEDY**

3 credits.

Close reading of several plays with attention to Aristophanes' lyric genius and political opinions.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**GREEK 521 – GREEK TRAGEDY**

3 credits.

Close reading of selected plays of Aeschylus, Sophocles or Euripides.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**GREEK 530 – HERODOTUS**

3 credits.

Close reading of selections from Herodotus, with a focus on developing skills in reading and interpreting historical texts.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018



**GREEK 532 – THUCYDIDES**

3 credits.

Close reading of selections from Thucydides, with a focus on developing skills in reading and interpreting historical texts.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**GREEK 541 – GREEK PHILOSOPHICAL WRITERS**

3 credits.

Featuring close reading in the original language of canonical works for classical Greek philosophy, including but not limited to Plato and Aristotle, develop proficiency in the Greek language of the classical and post-classical periods, emphasizing grammar, style, socio-historical context, and the history of ideas.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frqn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**GREEK 551 – ATTIC ORATORS**

3 credits.

Selected speeches from Antiphon to Hypereides, with emphasis upon the contribution of rhetoric to the intellectual life of the fourth century.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**GREEK 560 – HELLENISTIC GREEK**

3 credits.

A selection of texts, chiefly religious in content, pagan, Jewish, and Christian.

**Requisites:** GREEK 306 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**GREEK 681 – HONORS THESIS**

3 credits.

Individual mentored study for completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**GREEK 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**GREEK 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GREEK 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**GREEK 699 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**GREEK 801 – SURVEY OF GREEK LITERATURE**

3 credits.

Surveys a substantial portion of Ancient Greek Literature, from the Archaic Age through the Roman Imperial Period. Readings include primary sources and secondary literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**GREEK 890 – INDIVIDUAL RESEARCH THESIS**

1-12 credits.

Individual mentored study for completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**GREEK 910 – SEMINAR-POETRY**

3 credits.

Advanced study in Greek poetry, secondary scholarship, and ancient and modern literary interpretation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**GREEK 930 – SEMINAR-HISTORY**

3 credits.

Advanced study in Greek historiography, secondary scholarship, and ancient and modern literary interpretation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

## HEBREW-BIBLICAL (HEBR-BIB)

**HEBR-BIB 103 – ELEMENTARY BIBLICAL HEBREW, I**

4 credits.

Introduction to the language of the Hebrew Bible (Biblical Hebrew). Serves as basis for later forms of Classical Hebrew.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**HEBR-BIB 104 – ELEMENTARY BIBLICAL HEBREW, II**

4 credits.

Introduction to the language of the Hebrew Bible (Biblical Hebrew). Serves as basis for later forms of Classical Hebrew.

**Requisites:** HEBR-BIB 103

**Course Designation:** Frgn Lang - 2nd semester language course Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HEBR-BIB 303 – ELEMENTARY BIBLICAL HEBREW, I**

3 credits.

Forms and syntax, reading of Classical Hebrew prose in preparation for research.

**Requisites:** Graduate/professional standing

**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**HEBR-BIB 304 – ELEMENTARY BIBLICAL HEBREW, II**

3 credits.

Forms and syntax, reading of Classical Hebrew prose in preparation for research.

**Requisites:** HEBR-BIB 303

**Course Designation:** Frgn Lang - 2nd semester language course Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HEBR-BIB 323 – INTERMEDIATE BIBLICAL HEBREW, I**

4 credits.

Review of grammar, introduction to reading narrative texts in Biblical Hebrew.

**Requisites:** HEBR-BIB 104, 304, or graduate/professional standing

**Course Designation:** Frgn Lang - 3rd semester language course Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**HEBR-BIB 324 – INTERMEDIATE BIBLICAL HEBREW, II**

4 credits.

Review of grammar, introduction to reading narrative texts in Biblical Hebrew.

**Requisites:** HEBR-BIB 323 or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HEBR-BIB/CLASSICS/JEWISH/LITTRANS/RELIG ST 332 – PROPHETS OF THE BIBLE**

4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English).

**Requisites:** CLASSICS/JEWISH/LITTRANS/RELIG ST/CLASSICS/JEWISH/LITTRANS 227 or Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HEBR-BIB/JEWISH 513 – BIBLICAL TEXTS, POETRY**

3 credits.

Critical reading of selected texts from the Minor Prophets and the Writings.

**Requisites:** HEBR-BIB 324

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**HEBR-BIB/JEWISH 514 – BIBLICAL TEXTS, POETRY**

3 credits.

Critical reading of selected texts from the Latter Prophets and the Writings.

**Requisites:** HEBR-BIB/JEWISH 513

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HEBR-BIB 700 – ADVANCED NEAR EASTERN LANGUAGES**

3 credits.

Provides graduate-level instruction in languages required for research in the literature, history, and culture of the Ancient Near East. Languages typically offered include Akkadian, Phoenician, Sumerian, Hittite, and Egyptian.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HEBR-BIB 701 – ARAMAIC I**

3 credits.

Grammar and readings in Biblical Aramaic (Daniel, Ezra).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**HEBR-BIB 702 – ARAMAIC II**

3 credits.

Selections from non-biblical Aramaic texts: Inscriptions, Elephantine letters, Ahiqar, Targumim.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HEBR-BIB 703 – UGARITIC TEXTS**

3 credits.

Readings in mythological, administrative, and epistolary texts from Ras Shamra-Ugarit.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**HEBR-BIB 704 – CANAANITE DIALECTS**

3 credits.

Phoenician, Punic, Moabite, and Hebrew epigraphic texts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**HEBR-BIB 705 – SYRIAC I**

3 credits.

Syriac grammar and reading.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**HEBR-BIB 706 – SYRIAC II**

3 credits.

Readings in Peshitta, literary texts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HEBR-BIB 723 – CLASSICAL HEBREW LINGUISTICS: HISTORICAL AND DESCRIPTIVE**

3 credits.

The phonology, morphology and syntax of biblical Hebrew; viewed from historical and descriptive linguistic perspectives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HEBR-BIB 743 – PENTATEUCHAL NARRATIVES**

3 credits.

Philological and literary study of the Hebrew narratives in Genesis through Deuteronomy, with readings in the ancient translations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**HEBR-BIB 744 – PENTATEUCHAL LEGAL CODES**

3 credits.

A philological and comparative study, in Hebrew, of legal codes embedded in the narratives of Exodus, Leviticus, and Deuteronomy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**HEBR-BIB 751 – THE BOOK OF ISAIAH**

3 credits.

Philological and literary study of the Hebrew text of Isaiah 1-39. Readings in the ancient translations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**HEBR-BIB 752 – THE BOOK OF ISAIAH**

3 credits.

Philological and literary study of the Hebrew text of Isaiah 40-66. Readings in the ancient translations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**HEBR-BIB 754 – WISDOM LITERATURE: JOB**

3 credits.

Philological and literary study of the Hebrew text of Job. Readings in the ancient translations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HEBR-BIB 755 – PSALMS**

3 credits.

Philological and linguistic study of the Book of Psalms in Hebrew, with readings in the ancient translations. Special attention will be given to the book's bearing on our understanding of ancient Israelite religion(s).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**HEBR-BIB 799 – INDEPENDENT STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HEBR-BIB 951 – SEMINAR-BIBLICAL STUDIES**

2 credits.

Examine topics relevant to Biblical Studies through textual analysis and research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**HEBR-BIB 990 – RESEARCH AND THESIS**

2-9 credits.

Individual study for research and completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## HEBREW-MODERN (HEBR-MOD)

**HEBR-MOD 101 – FIRST SEMESTER HEBREW**

4 credits.

Basic communication skills; speaking, reading, writing modern Hebrew; elements of grammar and syntax.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HEBR-MOD 102 – SECOND SEMESTER HEBREW**

4 credits.

Basic communication skills; speaking, reading, writing modern Hebrew; elements of grammar and syntax.

**Requisites:** HEBR-MOD 101 or placement into HEBR-MOD 102

**Course Designation:** Frgn Lang – 2nd semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HEBR-MOD 201 – THIRD SEMESTER HEBREW**

4 credits.

Readings from modern Hebrew texts, intermediate grammar and syntax, development of oral proficiency, emphasis on class discussions.

**Requisites:** HEBR-MOD 102 or placement into HEBR-MOD 201

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HEBR-MOD 202 – FOURTH SEMESTER HEBREW**

4 credits.

Readings from modern Hebrew texts, intermediate grammar and syntax, development of oral proficiency, emphasis on class discussions.

**Requisites:** HEBR-MOD 201 or placement into HEBR-MOD 202

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HEBR-MOD/JEWISH 301 – INTRODUCTION TO HEBREW LITERATURE**

3 credits.

Selected works from different periods and genres. Taught in Hebrew.

**Requisites:** HEBR-MOD 202 or placement into JEWISH/HEBR-MOD/JEWISH 301

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HEBR-MOD/JEWISH 302 – INTRODUCTION TO HEBREW LITERATURE**

3 credits.

Selected works from different periods and genres. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 301 or placement into JEWISH/HEBR-MOD/JEWISH 302

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HEBR-MOD 310 – FIRST SEMESTER INTENSIVE MODERN HEBREW**

4 credits.

Intensive study of the fundamental structure of Hebrew language, using the four language skills (listening, speaking, reading, and writing) to improve Hebrew proficiency. Grammar, pronunciation and vocabulary are incorporated into the daily activities, with an emphasis on speaking and using the language for communication. The Hebrew alphabet is also introduced.

**Requisites:** Declared in the Middle Eastern and Mediterranean Language Institute (MEDLI)

**Course Designation:** Frgn Lang – 1st semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**HEBR-MOD 311 – SECOND SEMESTER INTENSIVE MODERN HEBREW**

4 credits.

Intensive study of the fundamental structure of Hebrew language, using the four language skills (listening, speaking, reading, and writing) to improve Hebrew proficiency. Grammar, pronunciation and vocabulary are incorporated into the daily activities, with an emphasis on speaking and using the language for communication. The Hebrew alphabet is also introduced.

**Requisites:** Declared in the Middle Eastern and Mediterranean Language Institute (MEDLI)

**Course Designation:** Frgn Lang – 1st semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**HEBR-MOD/JEWISH 401 – TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE I**

3 credits.

Readings in Hebrew literature. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 302 or placement into JEWISH/HEBR-MOD/JEWISH 401

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frgn Lang – 5th + semester language course

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**HEBR-MOD/JEWISH 402 – TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE II**

3 credits.

Readings in Hebrew literature. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 401 or placement into JEWISH/HEBR-MOD/JEWISH 402**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frqn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## HISTORY (HISTORY)

**HISTORY 101 – AMER HIST TO THE CIVIL WAR ERA, THE ORIGIN & GROWTH OF THE U S**

4 credits.

American political, economic, and social development from the founding of the colonies to the Civil War.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 102 – AMERICAN HISTORY, CIVIL WAR ERA TO THE PRESENT**

4 credits.

American political, economic and social development from the Civil War to the present.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/ASIAN 103 – INTRODUCTION TO EAST ASIAN HISTORY: CHINA**

3-4 credits.

Survey of major developments in Chinese history from 1500 B.C. to the founding of the Communist state in 1949. Emphasis on patterns and themes; equal time devoted to the classical and traditional period and the modern era.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ASIAN 104 – INTRODUCTION TO EAST ASIAN HISTORY: JAPAN**

3-4 credits.

Survey of major cultural, social, political and economic developments in Japanese history from ancient to recent times.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 105 – INTRODUCTION TO THE HISTORY OF AFRICA**

3-4 credits.

Major historic and current problems in African life, as seen by Africans.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ED POL 107 – THE HISTORY OF THE UNIVERSITY IN THE WEST**

3 credits.

Traces the development of higher education and, specifically, the institution known as the "university," in the United States and Europe since the Middle Ages. Concentrates on the intellectual, political, and social history of higher education, focusing particularly on the history of the "university" as an IDEA, an INSTITUTION, and as a community of PEOPLE, including students and faculty.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/ASIAN 108 – INTRODUCTION TO EAST ASIAN HISTORY – KOREA**

3-4 credits.

Survey of major cultural, social, political, and intellectual developments in Korea from the 10th century to the 21st century.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018



**HISTORY 109 – INTRODUCTION TO U.S. HISTORY**

3-4 credits.

Exploration of a thematic or chronological area of United States history from a variety of critical historical perspectives. Topics vary by instructor.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY/CLASSICS 110 – THE ANCIENT MEDITERRANEAN**

4 credits.

An examination of the evolution of the human community in the Mediterranean Basin, from the beginning of the earliest civilizations in the Near East (3,000 B.C.E.) until the collapse of the Roman Empire in the West (500 C.E.).

**Requisites:** None**Course Designation:** Breadth – Humanities Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY 111 – CULTURE & SOCIETY IN THE ANCIENT MEDITERRANEAN**

3-4 credits.

A thematic and cross-cultural introduction to the ancient Mediterranean world from prehistoric times to Late Antiquity. Studies chronological change and cultural diversity by looking at a series of case studies arranged around a weekly theme. Examines the connectivity and isolation of communities across the Mediterranean world, varieties of political organization and social relations, as well as economic structures.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HISTORY/MEDIEVAL/RELIG ST 112 – THE WORLD OF LATE ANTIQUITY (200-900 C.E.)**

4 credits.

History of the Mediterranean World from the late Roman Empire to the development of distinct European, Byzantine and Islamic civilizations (ca. 200-900 CE). Special attention will be paid to the rise and development of Christianity and Islam.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY 115 – MEDIEVAL EUROPE 410-1500**

4 credits.

From the later Roman Empire to the end of the Middle Ages.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 118 – EARLY MODERN WORLD**

3-4 credits.

An introduction to world history, 1450-1800, when new connections were forged between continents and, arguably, "the world" became one place. Study travelers, merchants, refugees, and empires, and the objects that bound them together: Ming porcelain and silk, woolen blankets and calico, silver and cochineal. We shall explore changing understandings of boundaries, oceans, travel, and "the world" itself.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HISTORY 119 – EUROPE AND THE WORLD, 1400-1815**

4 credits.

Introduces Europe when it entered the global stage economically, politically, socially, and culturally. How Europeans took to the seas and developed new forms of empire. How did this wave of contact, encounter, and conquest affect Europeans, indigenous peoples of the Americas, and Africans? Examine the early global economy and the development of plantation slavery. How did Europeans develop new ways to make sense of their world, its size, its peoples, its flora and fauna? Explore new forms of Christianity, the Jewish diaspora, and the globalization of Christianity. As thinkers debated how rulers should wield political power, monarchs strove to expand their authority and territory, and ordinary people demanded a greater share of political power, provoking revolutions across the Atlantic world. Encounter the lives of women and men from many backgrounds, from peasants to queens, and all kinds of people on the move.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 120 – EUROPE AND THE MODERN WORLD 1815 TO THE PRESENT**

4 credits.

Political, economic, social, and cultural history of modern Western civilization.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**HISTORY 123 – ENGLISH HISTORY: ENGLAND TO 1688**

3–4 credits.

Political, economic, social, and cultural history from earliest historic times.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY 124 – BRITISH HISTORY: 1688 TO THE PRESENT**

4 credits.

Political, economic, social, and cultural history of Great Britain.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY/ENVIR ST/HIST SCI 125 – GREEN SCREEN: ENVIRONMENTAL PERSPECTIVES THROUGH FILM**

3 credits.

From Teddy Roosevelt's 1909 African safari to the Hollywood blockbuster King Kong, from the world of Walt Disney to The March of the Penguins, cinema has been a powerful force in shaping public and scientific understanding of nature throughout the twentieth and twenty-first century. How can film shed light on changing environmental ideas and beliefs in American thought, politics, and culture? And how can we come to see and appreciate contested issues of race, class, and gender in nature on screen? Explore such questions and come to understand the role of film in helping to define the contours of past, present, and future environmental visions in the United States, and their impact on the real world struggles of people and wildlife throughout the world.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY/AFRICAN 129 – AFRICA ON THE GLOBAL STAGE**

3–4 credits.

Explores the interplay between Africa and the World from the 19th century to the present, covering subjects such as the slave- trade, repatriation, Africanizing of culture in the Americas and Europe, the spread and revival of world religions, colonialism, global capitalism, the rise of global popular culture such as pop music and video films, environmental concerns and global epidemics.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HISTORY 130 – AN INTRODUCTION TO WORLD HISTORY**

3–4 credits.

Introduction to major themes in world history. Such themes might include: empire and imperialism, environmental impacts, global trade and globalization, war, migration, gender, race, religion, nationalism, class, and the like.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/RELIG ST 131 – INTRODUCTION TO CHRISTIANITY: JESUS TO THE PRESENT**

4 credits.

Survey of Christianity from its beginnings to its diverse global manifestations today, including beliefs, institutions, ritual, lived experience, and interactions with broader culture and society.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HISTORY/HIST SCI/MED HIST 132 – BEES, TREES, GERMS, AND GENES: A HISTORY OF BIOLOGY**

3 credits.

How did today's biology emerge out of the diverse traditions of agriculture and natural history (bees and trees), biomedicine and molecular biology (germs and genes), which stretch back into the eighteenth century? Examines classic texts and "game-changers" in the history of biology, putting them into broader scientific and social contexts to see how these different ways of knowing intertwined, competed, and yielded novel approaches to the study of life that still shape today's life sciences.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **HISTORY 133 – GLOBAL MILITARY HISTORY (5000 BCE - PRESENT)**

3-4 credits.

Introductory examination of the role of war and peace in human history from the earliest forms of organized violence to the 21st century "War on Terror." Rather than center on tactics, key battles, or even particular critical conflicts, instead focuses on how different military cultures and technologies emerged over time across the globe. Explores how organized violence shaped not just the lives of soldiers, but all members of society by examining key pieces of popular culture including poetry, propaganda, music, movies, and social media. Takes a deliberately global approach by examining the connections and commonalities of war across different world regions.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **HISTORY/GEN&WS 134 – WOMEN AND GENDER IN WORLD HISTORY**

3-4 credits.

A global (comparative and transnational) survey of women and gender from the ancient world to the modern period. Introduces students to key issues in the history of women and gender, including the historical construction of identities, roles, symbols, and power relationships.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HISTORY 136 – SPORT, RECREATION, & SOCIETY IN THE UNITED STATES**

3-4 credits.

As much as we may try to convince ourselves that sport offers an escape from the "real world," constant news of players' strikes, stadium financing controversies, and the lack of diversity in league management remind us that we cannot separate the games we play and watch from the political, social, and cultural contexts in which they are embedded. Explore how sport has shaped and been shaped by major trends in American social, political, and economic history. The focus is not on player stats or the morning edition of SportsCenter, rather with serious historical arguments and debates about sport's relationship to American capitalism, social movements, and urban development. Readings also provide a diverse set of perspectives on the politics of race, gender, and class in American sport in the twentieth century.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HISTORY 139 – INTRODUCTION TO THE MODERN MIDDLE EAST**

3-4 credits.

Traces the formation of the states and societies that compose the contemporary Middle East. How have global phenomena, including two world wars, the Cold War, women's movements, and modern science, technology, and fossil fuels, affected the politics, culture, and daily lives of Middle Eastern people? What is Islamism, and how should we explain its influence? Why has the United States had such a troubled relationship with this part of the world? Balances a generally thematic approach with several weeks of country-specific studies, including Iran, Saudi Arabia, Egypt, Syria, and Israel and the Palestinian territories.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HISTORY 140 – CONSPIRACY THEORIES IN CONTEXT**

3-4 credits.

The historical development of selected conspiracy theories in the United States, with particular emphasis on contextual analysis of conspiracist texts on the internet.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **HISTORY 142 – HISTORY OF SOUTH ASIA TO THE PRESENT**

3-4 credits.

Survey of the development of societies within the Indian subcontinent. Equal segments for the ancient, medieval and modern periods.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/ED POL 143 – HISTORY OF RACE AND INEQUALITY IN URBAN AMERICA**

3 credits.

Examine the historical relationships between metropolitan change, economic transformation, and the construction of race and how those processes have shaped mass incarceration, educational, housing, and income inequality, and the experiences of racial/ethnic minorities who have been marginalized or discriminated against. Key questions include: What is the historical nature of inequality and opportunity in metropolitan America? What policies and ideas have historically promoted inequality, and how have those policies and ideas shifted over time? How have marginalized people responded to inequality, and what impacts have various modes of resistance had? Lastly, what is "race," how has its meaning changed over time, and how has it historically shaped inequality and opportunity?

**Requisites:** None**Course Designation:** Gen Ed – Communication Part B

Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 144 – TRAVELING THE WORLD: SOUTH ASIANS IN DIASPORA**

4 credits.

Millions of South Asians left their home in the Indian subcontinent to travel the world across the Indian Ocean to Africa, the Middle East and Southeast Asia; across the Atlantic Ocean to the Caribbean and Britain; and across the Pacific Ocean to Fiji and California. Follow these Indian traders, political leaders, workers and pilgrims as they discovered the world beyond India. The cultural, social, economic and political experiences of these sojourners and settlers reveals an exciting transnational perspective on the history of migration, diaspora, nationalism and colonialism in India, Africa, Asia, America and Britain.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HISTORY 145 – AMERICA AND CHINA, 1776-TODAY**

3-4 credits.

Analyzes the relationship between China and the United States since the birth of the U.S. in 1776, and tracks how the relationship has changed over time. Seeks to offer a broader perspective on the US-China relationship that includes not only diplomacy and war, but also culture, economics, and domestic politics. Contextualize the steady drumbeat of news stories about America and China, and make educated, historically rooted arguments about China, the US, and their complex relationship.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY 150 – AMERICAN HISTORIES: THE NINETEENTH CENTURY**

4 credits.

An introduction to the major themes of U.S. history from nationhood to emergence as a world power. An exploration of the range of primary sources available to U.S. historians and the varieties of historical argument.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HISTORY/CHICLA 151 – THE NORTH AMERICAN WEST TO 1850**

3-4 credits.

Explores the history of places that have been called the American West before 1850. We start with Indigenous occupation; continue with European invasion and the creation of two new nations, Mexico and the U.S.; and end with U.S. conquest. We watch Indian lands becoming the object of Spanish, French, and English empires, and then see European incursions giving way to the hopes of new nation-states and newly empowered Indian peoples like Lakotas and Comanches. After studying the trails and trades that brought newcomers west, we reach key converging events: U.S. seizure of the Mexican North, resolution of the Oregon boundary dispute, discovery of western gold, West Coast arrival of Chinese immigrants, and Mormon exodus to the Great Basin. We use economic, environmental, political, cultural, and social analyses, and we attend to the dreams of many westerners: of North American, Latin American, European, African, and Asian origin or descent, and of all genders and class statuses.

**Requisites:** None**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**HISTORY/CHICLA 152 – THE U.S. WEST SINCE 1850**

3-4 credits.

This course explores the history of places that have been called the American West since 1850. We start with incorporation, as the U.S. surveyed a West that had become American in name and tried to make it American in fact, a process that westerners resisted as often as they welcomed it. By the late 19th century, the West was an identifiable region with characteristic economic features, race relations, and federal ties, and it held a unique place in collective memory. In the 20th century, western distinctiveness faded in some ways and persisted in others, and western variants unfolded of the world wars, Depression, Cold War, and Vietnam War; civil rights; suburbanization and the New Right; environmentalism; immigration; and globalization. We employ economic, environmental, political, cultural, and social analyses, and attend to the dreams of many westerners: people of North American, Latin American, European, African, and Asian descent, and of all genders, classes, and sexualities.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/CHICLA 153 – LATINA/LATINO/LATINX HISTORY**

3-4 credits.

Examines the historical, social, and legal experiences of Latinas/Latinos/Latinxs in the US since the mid-1800s with emphasis on Mexican migrations. Latinxs became an important part of the US population through western expansion, conquest, and immigration. We will learn about the 3 main Latinx groups in the US: Mexicans, Puerto Ricans, and Cubans, but will also learn about other Latinx communities. We begin with an examination of conquest by studying the Treaty of Guadalupe Hidalgo that annexed roughly half of former Mexican territory and the Spanish-American War that resulted in the possession of Puerto Rico. Then, we examine the history of Latinx immigration to understand the experiences of Mexicans, Central Americans, South Americans, and people from the Caribbean who have immigrated to the US in search of economic opportunities and political asylum. This course serves as an introduction to the varied experiences of Latinxs in the US in order to understand their unique histories.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**HISTORY/ASIAN AM 160 – ASIAN AMERICAN HISTORY: MOVEMENT AND DISLOCATION**

3-4 credits.

Examines the impact of colonialism, war, and capitalism on the movement of Asians to the U.S. Considers how racial, gendered, class, sexual, and national formations within the U.S. structured Asian immigration to North America.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ASIAN AM 161 – ASIAN AMERICAN HISTORY: SETTLEMENT AND NATIONAL BELONGING**

3-4 credits.

Examines the social, cultural, and political citizenship of Asians in the U.S. with particular emphasis on diaspora, transnationality, and place.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**HISTORY/HIST SCI 171 – HISTORY OF MEDICINE IN FILM**

3-4 credits.

Considers the social and cultural history of 20th and early 21st century American medicine through the depiction of health care practitioners and health care systems in Hollywood movies. View films that featured medicine, doctors, nurses, patients, and hospitals. Using these films as primary sources, seek to place these representations into a broader social and cultural context. Evaluate the extent to which popular understandings of medicine, health, and healing as portrayed in the films corresponded to actual practices of medicine and medical research at the time the films were first screened for mass audiences.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019

**HISTORY/AMER IND 190 – INTRODUCTION TO AMERICAN INDIAN HISTORY**

3-4 credits.

A broad survey of American Indian history which centers Indigenous peoples, communities, and nations in the context of U.S. policy and culture that emphasizes decolonial methods and Native ways of knowing the past.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 199 – DIRECTED STUDY**

1-3 credits.

Independent study in collaboration with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**HISTORY 200 – HISTORICAL STUDIES**

1-4 credits.

Introduction to historical studies at the research university. Emphasis on interpretation and critical thinking. Topics vary.

**Requisites:** Sophomore standing or 3 credits in HISTORY**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY 201 – THE HISTORIAN'S CRAFT**

3-4 credits.

Conduct original historical research and convey the results to others. Through engagement with archival materials, become historical detectives; practice defining important historical questions, collecting and analyzing evidence, presenting original conclusions, and contributing to ongoing discussions. Confer individually with and receive feedback from instructors to improve skills of historical analysis and communication in both written and spoken formats. May not be repeated for credit.

**Requisites:** Satisfied Communications A requirement. Not open to students with credit for HIST SCI 211**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/RELIG ST 205 – THE MAKING OF THE ISLAMIC WORLD: THE MIDDLE EAST, 500-1500**

3-4 credits.

Development of society and culture in the Middle East and North Africa from the emergence of Islam (7th century) to early modern times.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/RELIG ST 208 – WESTERN INTELLECTUAL AND RELIGIOUS HISTORY TO 1500**

3-4 credits.

Survey of key themes in Western intellectual history and religious thought from ancient Greece through the Renaissance, focusing on relationships among classical, Jewish, and Christian traditions.

**Requisites:** Sophomore standing or 3 credits in HISTORY or RELIG ST**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/RELIG ST 209 – WESTERN INTELLECTUAL AND RELIGIOUS HISTORY SINCE 1500**

3-4 credits.

A survey of major trends in Western intellectual history and religious thought in the modern era, a period that saw a new range of competing ideas about the divine, the human condition, justice and the social order, and the quest for meaning. Explores shifts in Christian and Jewish thought as well as secular alternatives to religious outlooks. Topics include the impact of the Reformation, Scientific Revolution, and Enlightenment; radical critiques of religion; existentialism; theological responses to World Wars and the Holocaust; and civil rights and social justice. Sources include films, novels, autobiographies, essays, theological works, and political manifestos.

**Requisites:** Sophomore standing or 3 credits in HISTORY or RELIG ST**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/RELIG ST 212 – THE HISTORY OF WESTERN CHRISTIANITY TO 1750**

4 credits.

A survey of Christianity from being a small, persecuted sect in the Roman Empire to becoming the dominant religion of western Europe, penetrating into the lives of Europeans, fissuring into multiple churches, and spreading across the globe. Attention is given to doctrine, ritual, worship, architecture, images, and music.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018



**HISTORY/JEWISH 213 – JEWS AND AMERICAN POP. CULTURE**

3-4 credits.

Explores the interplay between Jews and U. S. popular culture, covering such subjects as early 20th century vaudeville, the "golden age" of Hollywood, rhythm and blues music, television, and stand-up comedy.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2017**HISTORY/JEWISH 219 – THE AMERICAN JEWISH EXPERIENCE: FROM SHTETL TO SUBURB**

4 credits.

Surveys American Jews from the eighteenth century until after WW II, examining political behavior (radicalism, liberalism, and nationalism), class formation, social mobility, culture, inter-ethnic group relations, religion, and problems in community building.

**Requisites:** Sophomore standing or 3 credits in HISTORY or JEWISH**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/JEWISH 220 – INTRODUCTION TO MODERN JEWISH HISTORY**

4 credits.

The history of the Jews in selected parts of the world since the 17th century. Particular attention will be paid to the fact that this is the history of a minority group whose life unfolds in relationship to a larger society.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**HISTORY 221 – EXPLORATIONS IN AMERICAN HISTORY (H)**

3-4 credits.

Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY 223 – EXPLORATIONS IN EUROPEAN HISTORY (H)**

3-4 credits.

Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**HISTORY 224 – EXPLORATIONS IN EUROPEAN HISTORY (S)**

3 credits.

Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**HISTORY 225 – EXPLORATIONS IN THIRD WORLD HISTORY (H)**

3-4 credits.

Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**HISTORY 227 – EXPLORATIONS IN THE HISTORY OF RACE AND ETHNICITY**

3 credits.

Topics on racial/ethnic minorities in the US in historical perspective; or topics that intersect with race or ethnicity in the US; or comparative historical topics that address how racial/ethnic minorities in the US negotiate exclusion and marginalization.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**HISTORY 228 – EXPLORATIONS IN TRANSNATIONAL/COMPARATIVE HISTORY (SOCIAL SCIENCE)**

3 credits.

Explores topics that involve at least two continents. Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**HISTORY 229 – EXPLORATIONS IN TRANSNATIONAL/COMPARATIVE HISTORY (HUMANITIES)**

3 credits.

Explores topics that involve at least two continents. Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 241 – LATIN AMERICA FROM 1780 TO 1940**

4 credits.

Latin America from the Age of Revolution to the World Depression. Nation-state formation; rise of political conflict and socioeconomic inequality.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**HISTORY/INTL ST/LACIS 242 – MODERN LATIN AMERICA**

3–4 credits.

A broad overview of Latin American history in the modern period, since independence but with a primary focus on the twentieth century. Particular emphasis will be placed on the socioeconomic, cultural, and political structures and processes that shaped and continue to influence life in Latin America. Key issues such as colonialism, nationalism, democracy, and revolution will be examined critically in light of broad comparative themes in Latin American and world history. Among the topics to be explored in detail will be the Mexican and Cuban revolutions, populism and dictatorship, socialism and neoliberalism, and drugs and migration.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HISTORY/LACIS 243 – COLONIAL LATIN AMERICA: INVASION TO INDEPENDENCE**

3–4 credits.

An introductory survey of colonial Latin American history, from the late fifteenth to the early nineteenth century. Examines developments in Spanish and Portuguese America by reading both secondary and primary sources. Beginning with fifteenth-century Europe, the Americas and West Africa, discusses European expansion and invasion, first contacts between the so-called Old and the so-called New Worlds, as well as the role of religion, sexuality, gender, labor and production, trade and exchange, and politics. Each week, a central question will address the topic for that week. Become familiar with and contextualize key processes and events in colonial Latin American history and learn about the nature of colonization. Identify and evaluate historical arguments. Practice interpreting primary sources and building historical arguments about them.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/ASIAN/GEOG/POLI SCI/SOC 244 – INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES**

4 credits.

As an introduction to Southeast Asia, covers the ethnic, cultural, religious, and political histories of the region from the classical states period to the present, with an emphasis on colonialism, nationalism, decolonization, and the emergence of modern political and social systems into the 21st century, including an exposure to region's contemporary literature. Not open to students who completed LCA 244 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/CHICLA/GEN&WS 245 – CHICANA AND LATINA HISTORY**

3 credits.

Introduces the cultural, economic, social, and political history of Chicanas and Latinas in the U.S. and focuses on four major themes: contact between different ethnic/racial groups; ideas of nation and nationalism; constructions of identity; and struggles for social justice.

**Requisites:** None

**Course Designation:** Gen Ed – Communication Part B

Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **HISTORY/ASIAN/ASIAN AM 246 – SOUTHEAST ASIAN REFUGEES OF THE "COLD" WAR**

4 credits.

In-depth study of the peoples, conflicts, and wars in Cambodia, Laos, and Vietnam, with emphasis on the Cold War era (1945-1990) and on the resulting migration and resettlement of over one million Hmong, Khmer, Lao, and Vietnamese in the United States. Not open to students with credit for LCA 246 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HISTORY 248 – GLOBALIZATION AND CRISES**

3-4 credits.

Since 2008, leaders and politicians have constantly been defining, avoiding and responding to political, economic and cultural crisis. Concern about crises is not new and learning about how people around the world have responded to crises in the past could definitely help us respond to our present crises and perhaps pave the way to a better future. Examines various economic, political, cultural and intellectual crises from the early modern period to the present, and focus on how people have tried to make sense of them and go beyond them. At the same time, attempts to provide a historical framework that takes into account discussions of globalization avant la lettre, such as Janet Abu-Lugod's now well-known Beyond European Hegemony.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **HISTORY/GEOG/POLI SCI/SLAVIC 253 – RUSSIA: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of Russian civilization from its beginnings through the present day.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HISTORY/GEOG/POLI SCI/SLAVIC 254 – EASTERN EUROPE: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of East European culture, society, politics, and literature from its beginnings to the present day.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **HISTORY/ASIAN/POLI SCI 255 – INTRODUCTION TO EAST ASIAN CIVILIZATIONS**

3-4 credits.

Multidisciplinary and historical perspectives on the East Asian civilizations of China, Japan, Korea, Tibet and Mongolia from prehistory to the present, including developments in philosophy, economy, governance, social structure, kinship, geography, etc.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HISTORY/C&E SOC/POLI SCI/SOC 259 – FORWARD? THE WISCONSIN IDEA, PAST AND PRESENT**

1-3 credits.

Engage in ongoing reflection and dialogue on the Wisconsin Idea and how it informs the mission of the University of Wisconsin. Consider the Wisconsin Idea as it has developed since its beginnings, with a focus on what it means today and what it can mean in the future.

**Requisites:** Junior or senior standing only

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

### **HISTORY/AFROAMER/ANTHRO/C&E SOC/GEOG/LACIS/POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY/LEGAL ST 261 – AMERICAN LEGAL HISTORY TO 1860**

3–4 credits.

Surveys the development of American law down to the U.S. Civil War. Reviews the English historical background, and examines how law changed in colonial America, culminating in the framing of the U.S. Constitution. Explores how territorial expansion, democracy, and slavery shaped nineteenth-century American law. Emphasis is on how law interacts with political, social, and cultural change, with a focus on the origins of modern civil and constitutional rights.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/LEGAL ST 262 – AMERICAN LEGAL HISTORY, 1860 TO THE PRESENT**

3–4 credits.

Surveys the development of American law from the Civil War to the early Twenty-First Century. After a review of the U.S. Constitution and its modification by the Civil War amendments, examine the legal dimensions of such topics as race relations and the Civil Rights movement, the growth of modern business, the New Deal, labor rights, the women's movement, the individual rights revolution of the postwar period, and the contemporary conservative reaction. Emphasis on how law interacts with political, social, and cultural change.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/ANTHRO/ART HIST/DS/LAND ARC 264 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/GNS 265 – AN INTRODUCTION TO CENTRAL ASIA: FROM THE SILK ROUTE TO AFGHANISTAN**

3 credits.

Examination of human geography, ethnicity, nomadism and pastoralism, oases cultures, religion and international politics of the silk routes of central Asia. Not open to students with credit for HIST 265 prior to Fall 2018.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**HISTORY/ASIAN/RELIG ST 267 – ASIAN RELIGIONS IN GLOBAL PERSPECTIVE**

3–4 credits.

Comparative and thematic introduction to diverse Asian religious traditions, ideas and communities, and their relevance to human societies of the past and present. Not open to students with credit for E ASIAN 267 prior to Fall 2019

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY/CHICLA/LACIS/POLI SCI 268 – THE U.S. & LATIN AMERICA FROM THE COLONIAL ERA TO THE PRESENT: A CRITICAL SURVEY**

3 credits.

A critical examination of US-Latin American relations from the colonial era to the present, tracing the emergence and evolution of the United States as a hemispheric and global power and its political and economic impact on Latin America. Primary attention will be focused on US relations with Mexico, Central America and the Caribbean, but other Latin American countries will figure prominently during certain episodes.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020

### **HISTORY 269 – WAR, RACE, AND RELIGION IN EUROPE AND THE UNITED STATES, FROM THE SCRAMBLE FOR AFRICA TO TODAY**

3-4 credits.

Investigates the complex history of European and American violence and war-making through the lens of race and religion. Taking a comparative approach, analyzes several major conflicts of the twentieth century, from World War I to the wars of decolonization, and from the genocide of the Herero peoples to the Armenian Genocide, the Holocaust, and beyond. Key topics include the genealogy of the modern idea of "race" in Europe and the U.S.; the drive towards a world of more homogeneous nation-states after World War I; and the emergence of transnational protest movements opposed to racism, imperialism, antisemitism, and Islamophobia. Drawing on a range of texts, songs, and films, investigates new connections between Europe and the United States. Take an international look at concepts like race and nation, and try to make sense of extreme violence, war-making, and the pre-requisites of peace.

**Requisites:** Sophomore standing or 3 credits in HISTORY

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **HISTORY 270 – EASTERN EUROPE SINCE 1900**

3-4 credits.

Introduces the dramatic history of twentieth-century Eastern Europe, a place where imperialism, Nazism, Communism, genocide, democracy, and capitalism all left their mark. Three interrelated themes--war, revolution, and society--allow us to place Eastern Europe within broader comparative contexts. In addition to exploring significant political, economic, and cultural changes, discover how ordinary people--including workers, peasants, women, and children--experienced attempts to change the region and its people. Throughout, discuss how East Europeans continue to wrestle with the ghosts of their past today.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **HISTORY 271 – HISTORY STUDY ABROAD: EUROPEAN HISTORY**

1-4 credits.

Topics vary reflecting the specializations, expertise, and curricula of study abroad programs. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **HISTORY 272 – HISTORY STUDY ABROAD: UNITED STATES HISTORY**

1-4 credits.

Topics vary reflecting the specializations, expertise, and curricula of study abroad programs. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **HISTORY 273 – HISTORY STUDY ABROAD: NON-WESTERN HISTORY**

1-4 credits.

Topics vary reflecting the specializations, expertise, and curricula of study abroad programs. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **HISTORY 274 – HISTORY STUDY ABROAD: TRANSNATIONAL/ GLOBAL HISTORY**

1-4 credits.

Topics vary reflecting the specializations, expertise, and curricula of study abroad programs. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **HISTORY 275 – TOPICS IN LGBT HISTORY**

3 credits.

Topics in the major issues and themes in lesbian, gay, bisexual, and transgender history, considered across race, class, nationality, and time.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **HISTORY/AFRICAN/AFROAMER/ANTHRO/ GEOG/ POLI SCI/ SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY 278 – AFRICANS IN THE AMERICAS, 1492-1808**

3-4 credits.

Topics include demography and structure of the slave trade, but major focus on continuities and transformations of African cultures and social structures in the Americas--ethnicity, religion, kinship, gender, oral tradition, creolization, etc.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY 279 – AFRO-ATLANTIC HISTORY, 1808-PRESENT**

3-4 credits.

Emphasis on the history of political, social, and intellectual movements. Topics include slave resistance, freedom, black nationalism, socialism, anti-colonialism, gender, religion, art, literature, race, and medicine.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**HISTORY 283 – INTERMEDIATE HONORS SEMINAR-STUDIES IN HISTORY**

3 credits.

Honors, intermediate-level exploration of selected topics, featuring intensive reading, writing, and small-group discussion. Topics vary reflecting the interests, expertise, and innovating intention of the instructor.

**Requisites:** Declared in an Honors program**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**HISTORY/AFRICAN/AFROAMER/POLI SCI 297 – AFRICAN AND AFRICAN-AMERICAN LINKAGES: AN INTRODUCTION**

4 credits.

Analysis of retention of African elements in African-American oral, written, and material culture. Social, cultural, and political issues regarding race, self-definition, and self-determination in both Africa and North America will be examined.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**HISTORY 300 – HISTORY AT WORK: PROFESSIONAL SKILLS OF THE MAJOR**

1-2 credits.

Focuses on how a History major applies to the world of work. Explores how history skills relate to the needs of professional employers. Guides in the process of finding and obtaining professional internships. Polishes written and oral communication skills in forms appropriate for professional situations. Learn from the experiences of guest alumni speakers from a variety of fields.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 301 – HISTORY AT WORK: HISTORY INTERNSHIP SEMINAR**

1 credit.

Identify and analyze the differences between an internship and a non-professional job, with an eye towards articulating how a History degree and the skills it confers can be valuable in professional settings. Share internship experiences with classmates through short presentations. Discuss any issues or challenges that arose during internship experience. Concurrent enrollment in HISTORY 300 for 2 credits, which includes a discussion section, or previous credit in HISTORY 300 is required.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY 302 – HISTORY OF AMERICAN THOUGHT, 1859 TO THE PRESENT**

3-4 credits.

Designed for those who are interested in the role of ideas and culture in modern American history. Examine developments in philosophy, science, political theory, social criticism, and the arts in American life from 1859 to the present. Read the works of a number of influential thinkers and writers, as well as explore a variety of intellectual movements, which shaped the cultural worlds of late 19th- and 20th-century Americans. Themes include: the influence of Darwinism on religion; the impact of industrialization on ideas about American society; the revolt against formalism in philosophy, literature, and the social sciences; early twentieth-century conceptions of race, ethnicity, and gender; the responsibility of the intellectual in times of national and global crisis; post-WWII liberalism and existentialism; the rise of postmodernism in the academy and American popular culture, and the persistent contestations over the meaning and scope of American national identity.

**Requisites:** Sophomore standing or 3 credits in HISTORY or HIST SCI**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022



**HISTORY 303 – A HISTORY OF GREEK CIVILIZATION**

3-4 credits.

From the Bronze Age to the Hellenistic Age. Special emphases may vary with each offering.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 306 – THE UNITED STATES SINCE 1945**

3-4 credits.

Political, social, economic, and cultural changes in the U.S. from World War II to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**HISTORY 307 – A HISTORY OF ROME**

3-4 credits.

Roman civilization from the monarchy through the collapse of the Roman Empire in the west.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/ASIAN/RELIG ST 308 – INTRODUCTION TO BUDDHISM**

3-4 credits.

The basic thought, practices and history of Buddhism, including selflessness and relativity, practices of meditation, merit-making and compassion from both local and translocal perspectives. Includes a discussion of Buddhism as a contemporary, North American religion. Not open to students with credit for E ASIAN or LCA 308 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY/MEDIEVAL/RELIG ST 309 – THE CRUSADES: CHRISTIANITY AND ISLAM**

3-4 credits.

An examination of the Crusades from both Christian and Islamic perspectives; the historical, social, and religious context and significance of the Crusades for both Christians and Muslims.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/JEWISH 310 – THE HOLOCAUST**

3-4 credits.

References to the Holocaust abound in contemporary political debates and in our popular culture. But most people know very little about the history of the Holocaust, despite the mountains of superb historical scholarship that experts in the field have produced over decades of dedicated research. Utilize correspondence, diaries, or other firsthand accounts of Holocaust victims, together with study of the larger events around them, to reconstruct the experiences of ordinary families swept up in the Nazi genocide.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/GEN&WS 315 – GENDER, RACE AND COLONIALISM**

3 credits.

Investigates how gender and race were socially constructed in cultural encounters between Europeans and "other" peoples in Africa, Asia, and the Americas.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**HISTORY/ASIAN 319 – THE VIETNAM WARS**

3-4 credits.

Explores the prolonged cycle of wars in Vietnam and its neighbors, 1940 to date, with due regard for both local and U.S. perspectives.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 320 – EARLY MODERN FRANCE, 1500-1715**

3-4 credits.

Social, cultural and political history of France (1500-1715): Renaissance; Reformation and Wars of Religion; Rise of absolutist monarchy; Popular culture and peasant life; Colonization and New France.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HISTORY/AFROAMER 321 – AFRO-AMERICAN HISTORY SINCE 1900**

3-4 credits.

Survey of African American history from 1900 to the present. Topics covered include segregation, the Civil Rights Movement, the political, social and cultural changes of the late 20th century, and the Obama presidency.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/AFROAMER 322 – AFRO-AMERICAN HISTORY TO 1900**

3-4 credits.

Survey of African American history from its roots in Africa to the end of the 19th century. Topics considered include the slave trade, the political and cultural practices of enslaved communities, forms of resistance, Reconstruction, and systems of segregation.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**HISTORY/HIST SCI 323 – THE SCIENTIFIC REVOLUTION: FROM COPERNICUS TO NEWTON**

3 credits.

An introduction to the formative period of modern science, including major ideas and events in the physical and life sciences from Copernicus to Newton.

**Requisites:** Junior standing or (graduate/professional standing and concurrent enrollment in HIST SCI 623)**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**HISTORY/HIST SCI 324 – SCIENCE IN THE ENLIGHTENMENT**

3 credits.

Development and triumph of Newton's gravitational law; the conceptual revolution in chemistry; earth history and the move from religious to natural cosmologies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**HISTORY/ENVIR ST 328 – ENVIRONMENTAL HISTORY OF EUROPE**

3 credits.

Explores a new approach to a part of the world with a very old history, but one that is now as 'modern' as any. The changing, complex relations between Europeans and their environments from antiquity to the twenty-first century offer instructive comparison with American and current global environmental concerns. Approaching Mediterranean and Western civilizations from an environmental viewpoint also offers fresh perspective on these enduring cultures.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 329 – HISTORY OF AMERICAN CAPITALISM**

4 credits.

Survey of political, social, and economic change in the history of American capitalism from the late colonial period to the near-present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **HISTORY/INTL ST 330 – GLOBAL HISTORY OF HUMANITARIANISM**

3-4 credits.

What motivates us to try to alleviate the suffering of people in distant parts of the world? Examines the origins of humanitarian ideas and institutions, and how various humanitarian campaigns have been shaped by geopolitical processes, including the abolition of the slave trade, the spread of missionary Christianity, European imperialism, the Cold War, neoliberalism and the emergence of new media forms. Questions include: who has benefited from various humanitarian aid campaigns throughout history? How have various humanitarian campaigns shaped, and been shaped by, patterns of global inequality? Why have some populations, and not others, been deemed worthy of the world's compassion? Explores the worlds, perspectives and visions of humanitarians through a range of primary sources, including diary entries, political propaganda, memoirs, journalistic reportage, photography and documentary film.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **HISTORY/INTL ST 332 – EAST ASIA & THE U.S. SINCE 1899**

3-4 credits.

From the Boxer Rebellion, to the dropping of the atomic bombs, to the nuclear stand-off with North Korea, American foreign relations with East Asia during the 20th century were as consequential as they were controversial. Survey the issues and questions that alternately made allies and enemies of these nations: How did the quest for markets influence American policy towards China? How did European imperialism shape Japan's rise? Why did communism seem to offer a more compelling economic and political arrangement to China and North Korea? While squarely rooted in East Asia this course will also explore the questions that united and divided Americans over their nation's foreign policy. Through examining these questions, develop answers and construct their own narrative of the relationship between the United States and East Asia.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HISTORY/ASIAN 335 – THE KOREAS: KOREAN WAR TO THE 21ST CENTURY**

3-4 credits.

A historical examination of the Korean War and the politics and society of North Korea and South Korea.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **HISTORY 336 – CHINESE ECONOMIC AND BUSINESS HISTORY: FROM SILK TO IPHONES**

3-4 credits.

Utilizes an historical approach to explore the economic and business history of pre-modern and modern China. Topics addressed include: how people thought about property, labor, and value, money and the banking and financial systems, development of domestic and international markets and trade, major industries, the search for resources, agricultural economy, the connection of law and economy, organizations that affected the economy, systemic changes during the Republic and People's Republic, China's participation in international economic institutions, and more.

**Requisites:** Sophomore standing or 3 credits in HISTORY, ECON, or POLI SCI

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HISTORY/ASIAN 337 – SOCIAL AND INTELLECTUAL HISTORY OF CHINA, 589 AD-1919**

3-4 credits.

The culture of the literati in the T'ang; major trends of Neo-Confucianism during the Sung and Ming; the Confucian response to the West in the nineteenth century; the emergence of the modern Chinese intelligentsia and iconoclasm in the early May Fourth period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HISTORY 340 – CULTURAL HISTORY OF KOREA**

3-4 credits.

The culture and society of Korea have evolved hand in hand with the country's transformation from the Choson dynasty, a relatively isolated Confucian kingdom built on an agrarian economy, to South Korea and North Korea, two modern, industrialized nation-states in the globalized present. Explores key aspects of Korea's great cultural and social transformation from the 15th century to the 21st century. Delves into recent studies on gender history and on the constructed notion of "national culture." Also analyzes primary sources from different historical periods, as well as cinematic representations of Korea's past and present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/ASIAN 341 – HISTORY OF MODERN CHINA, 1800-1949**

3-4 credits.

The disintegration of traditional Chinese society under the impact of Western imperialism, the rise of modern Chinese nationalism, and the emergence of modern revolutionary movements and ideologies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/ASIAN 342 – HISTORY OF THE PEOPLES REPUBLIC OF CHINA, 1949 TO THE PRESENT**

3-4 credits.

The social, economic and political transformation of China under Communism; the role of ideology in contemporary Chinese historical development; the nature of that historical development in the comparative perspective of other post-revolutionary histories.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY 344 – THE AGE OF THE AMERICAN REVOLUTION, 1763-1789**

3-4 credits.

Structure of American society, Britain and the Colonies; the revolutionary movement for independence; the war for independence; social, political, and constitutional change.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HISTORY 345 – MILITARY HISTORY OF THE UNITED STATES**

3-4 credits.

The founding and growth of the military establishment, the exercise of the military art, and military policies treated in connection with relevant political, social, and economic factors.

**Requisites:** Sophomore standing. Not open to students with credit for HISTORY 427 or 428.

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/GEN&WS 346 – TRANS/GENDER IN HISTORICAL PERSPECTIVE**

3-4 credits.

Focuses on sex/gender crossing and variation in historical contexts including Japan, South Africa, Europe, the African diaspora, and North America. Considers perspectives of people who themselves passed, crossed, transitioned, transed, or otherwise exceeded their culture's definitions of normative sex/gender. Alongside, consider the ways that dominant social institutions reinforced norms, recognized, tolerated, punished and/or celebrated gender variation. Examine popular culture, medical and legal perspectives, memoir, queer and trans theory, and social movement treatises.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**HISTORY/AFROAMER 347 – THE CARIBBEAN AND ITS DIASPORAS**

3-4 credits.

Surveys the history of the Caribbean from the 15th century to the present. Emphasizes the importance of colonialism, commodity-based capitalism, globalization, slavery, and forced labor for the modeling of the region's social, economic, cultural, and political structures. Pay particular attention to the resilient, creative and resourceful ways in which Caribbean people have responded to these adverse conditions. Examine the circumstances that have shaped migrations from the region to the United States and Canada during the 20th and 21st centuries. Study how these diasporic communities have created social spaces in these two countries that have remained closely linked to the Caribbean through economic, political, and filial networks.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 348 – FRANCE FROM NAPOLEON TO THE GREAT WAR, 1799-1914**

3-4 credits.

Politics, society and culture in nineteenth century France. Emphasis on France's revolutionary heritage and problems of establishing a democratic regime.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HISTORY 349 – CONTEMPORARY FRANCE, 1914 TO THE PRESENT**

3-4 credits.

Social, political, and cultural history of twentieth century France, especially the Great War, the Popular Front, the Vichy Regime, DeGaulle and the Fifth Republic, Mitterrand's socialist experiment, France's changing role in the world and the European Community.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 350 – THE FIRST WORLD WAR AND THE SHAPING OF TWENTIETH-CENTURY EUROPE**

3-4 credits.

The experience and legacy of the First World War has been linked to nearly every social, cultural, and political transformation that marked the short century that followed: mobilization and the experience of total war transformed the relations between governments and citizens, between men and women, and between social classes. Europeans experienced death on an unprecedented scale and came to terms with new forms of industrialized warfare, from the use of poison gas to modern practices of genocide. Europeans now learned to live with violence, both during as well as after the war, and found new ways to mourn or remember the dead. Using a wide variety of contemporary sources -- memoirs, essays, poems, or cinematic representations -- situates the upheaval of 1914-1918 within the larger framework of twentieth-century European history.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY 351 – SEVENTEENTH-CENTURY EUROPE**

3-4 credits.

Intellectual, social and political developments during the seventeenth century. Impact of the Scientific Revolution and Rationalism on traditional beliefs. Revolts against Absolutism. The so-called "general crisis".

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**HISTORY/GEN&WS 353 – WOMEN AND GENDER IN THE U.S. TO 1870**

3-4 credits.

An advanced and comparative study of the roles of gender, class, and race in American history and historiography. Themes include women as agents of social change and as builders of community.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**HISTORY/GEN&WS 354 – WOMEN AND GENDER IN THE U.S. SINCE 1870**

3-4 credits.

See 520.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**HISTORY/CHICLA/LACIS/POLI SCI 355 – LABOR IN THE AMERICAS: US & MEXICO IN COMPARATIVE & HISTORICAL PERSPECTIVE**

3 credits.

Provides a critical examination of the history of labor and working people in the Americas, from the colonial era to the present. It focuses on the experience of the United States and Mexico, offering a comparative perspective on their distinct but also shared (and increasingly linked) histories. The seminar proceeds chronologically, highlighting major episodes in the evolution of labor systems in the two countries, beginning with the colonial labor systems implemented by the Spanish and British empires following the European conquest of the Western Hemisphere. Among other topics, we will examine the pivotal role of slavery and other forms of forced labor, the impact of the industrial revolution, the emergence and expansion of corporate capitalism and the labor unrest it provoked in the post-civil war U.S., the role of labor in the Mexican Revolution and its aftermath, the impact of the Great Depression and labor incorporation on the post-WWII social and political order of both countries, the breakdown of that order and the move to neo-liberalism in the 1970s and 1980s, and the emergence of an increasingly integrated North American production system and its consequences for labor and working people on both sides of the US-Mexico border.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**HISTORY 357 – THE SECOND WORLD WAR**

3–4 credits.

Background and history of World War II. Problems of peacemaking and international organizations; rise of Fascism, National Socialism, and Japanese imperialism; breaking the peace; World War II.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 358 – FRENCH REVOLUTION AND NAPOLEON**

3–4 credits.

Explores the French Revolution and the Age of Napoleon. Why did Revolution break out in one of the most powerful and traditional monarchies of Europe? What were the roots of discontent and the sources of revolutionary ideas? Probes the exciting twists and turns of revolutionary politics and the attempt to spread "liberty equality" into ordinary life, even abolishing slavery in response to massive slave revolt in the French colonies. Asks how the French interacted with a transnational revolutionary movement across Europe, the US, and the Atlantic world. Though focused on a specific revolutionary era, we will also reflect on timeless questions: Why is it so difficult to create democracy? Is violence ever justified to overcome oppression and injustice? Finally, why did this experiment in radical democracy also unleash the Terror and launch Napoleon Bonaparte, the politician and general who built an astonishing European Empire? And how did he pull it off for as long as he did?

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**HISTORY 359 – HISTORY OF EUROPE SINCE 1945**

3–4 credits.

Political, cultural, and social history of Europe from the Second World War to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/ENGL/RELIG ST 360 – THE ANGLO-SAXONS**

3 credits.

Life and literature during the Old English period (c450–c1100). Primary emphasis on the vernacular and Latin writings of the Anglo-Saxons themselves. Extensive historical and archaeological background; attention to the development and character of monasticism, to the production of manuscripts, etc. All reading in translation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 361 – THE EMERGENCE OF MOD BRITAIN: ENGLAND 1485-1660**

3–4 credits.

Cultural, economic, political, and social issues and developments, foreign relations; the background of empire.

**Requisites:** Sophomore standing, HISTORY 123, or 124

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**HISTORY/CLASSICS/POLI SCI 362 – ATHENIAN DEMOCRACY**

3 credits.

Explores key issues in the ideology and practice of Athenian democracy. Examines democratic values, institutions, rhetoric, and sociology in order to provide the basic tools to understand democracy in its ancient context. Engages with a variety of source material (literary, archaeological, epigraphic) in order to develop multiple skills of interpretation. Some questions examined include: What are the key features of Athenian democracy, how did it change over time, and how did it differ from modern democracy? How did the Athenians justify and critique this political system? How did they reconcile citizen egalitarianism with social inequalities of wealth, gender, and status? To what extent were women, foreigners, slaves, or the poor included or excluded from politics? Was Athenian democracy a robust political system or a system in crisis?

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No



**HISTORY/ASIAN 363 – CHINA AND WORLD WAR II IN ASIA**

3-4 credits.

This course is intended to help students understand World War II from the perspective of Asia. The focus is not only on the American and Japanese roles in the war but also on lesser, often overlooked participants such as China, Korea, and Southeast Asia. The course will focus not only on the diplomatic, political, and military situation of wartime Asia, but also on perceptions and experiences of the war from those most heavily affected by it: those experiencing it on the ground. Understanding this war is critical for helping us understand contemporary Asia. The foundations of the Cold War and the post-Cold War world that we live in today were forged on battlefields in mainland China, Burma, small islands in the Pacific, and in the skies over the archipelago of Japan. In order to provide the background and understand the legacies, this course covers an extended time frame, beginning in the 19th century with the arrival of the West in Asia and continues into the 1950s.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/INTL ST 366 – FROM FASCISM TO TODAY: SOCIAL MOVEMENTS AND POLITICS IN EUROPE**

3-4 credits.

Investigates how everyday people shaped European history and politics, from World War I through today. Takes a comparative and interdisciplinary approach to analyze a range of major social movements in Europe, thinking in detail about what constitutes a social movement in the first place, and what determines its effectiveness. Key topics include the rise and fall of Fascism; the fate of the Communist and Socialist Left in Europe; the role of youth movements as drivers of change; and the constraints imposed on political organizing by both democratic and authoritarian societies. Drawing on a range of texts, songs, and films, investigates how people power has shaped the European state, and vice-versa, from 1922 through today.

**Requisites:** Sophomore standing or 3 credits in HISTORY**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 367 – SOCIETY AND IDEAS IN SHAKESPEARE'S ENGLAND**

3-4 credits.

Explores the relationship between social change and the major systems of thought in Tudor and Stuart England. Popular magic and religion, astrology, witchcraft, the varieties of Anglican protestantism and puritan dissent, the scientific revolution and political thought.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY/ENVIR ST 369 – THINKING THROUGH HISTORY WITH ANIMALS**

3-4 credits.

Explores the history of human relationships with animals around the world with focus on agriculture and hunting, political economic development, human identity, and biological science and conservation.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**HISTORY/POLI SCI 370 – ISLAM AND POLITICS**

3-4 credits.

In the early twentieth century, a series of movements arose in the Middle East and South Asia, calling Muslims to return to Islam. Today, leaders and members of such groups -now known as Islamists -insist that one cannot live a fully Islamic life in the absence of an Islamic state. How and why did these movements come to focus on building an Islamic state? How do they pursue this goal?

**Requisites:** Sophomore standing or 3 Credits in HISTORY or POLI SCI**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/INTL ST 375 – THE COLD WAR - FROM WORLD WAR II TO END OF SOVIET EMPIRE**

3-4 credits.

The Cold War was the first event to impact virtually all of humanity and left a lasting legacy that still shapes the current world order. Exploration of its conduct on five continents entails both a diversity of sources (film, fiction, documents, and memoir) and a range of topics (geopolitics, ideology, internationalism, empire, revolution, counterinsurgency, and covert operations). Its half-century history was marked by nuclear-armed stalemate and ideological competition in Europe, cultural politics of repression and generational revolt in America, interplay of anti-colonial nationalism and counterinsurgency in Asia, Africa, and Latin America, and a succession of major wars worldwide in Korea, Vietnam, Angola, and Afghanistan. By adopting an international perspective that carries us beyond the narrow ambit of the Moscow-Washington rivalry, integrate diverse global forces and particular national histories for a fuller understanding of an ever-changing world system.

**Requisites:** Sophomore standing or 3 credits in HISTORY or INTL ST**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**HISTORY/GEN&WS 392 – WOMEN AND GENDER IN MODERN EUROPE**

3-4 credits.

An examination of the cultural role of gender and the social, economic, and political activities of women in modern Europe from the 18th to the late 20th centuries.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/AFROAMER 393 – SLAVERY, CIVIL WAR, AND RECONSTRUCTION, 1848-1877**

3-4 credits.

African-American slavery and its impact on mid-19th century social, political, and economic life; the causes, course, and consequences of the Civil War; the rise and fall of postwar Reconstruction and non-racial citizenship; the impact of these histories on contemporary American society.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/HIST SCI/MED HIST 394 – SCIENCE IN AMERICA**

3 credits.

From the colonial period to the present; emphasis on the development of scientific institutions and the influence of science on American life.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**HISTORY 400 – UNDERGRADUATE HISTORY SYMPOSIUM**

1 credit.

Whatever we do, wherever we go, we are encountering history and reckoning with some consequence radiating out from the past. Designed to awaken us to the myriad ways in which the past is present all around us, and to help cultivate the historian's habits of mind in our everyday experiences. In addition to faculty-led group discussions, centers on intellectual opportunities in Madison such as special lecture series and conversations with UW faculty and outside guests. Themes and topics will vary, depending on the instructor and opportunities for engagement with the wider intellectual community of Madison.

**Requisites:** Declared in the History undergraduate program, Certificate in History, or 6 credits in HISTORY or HIST SCI**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**HISTORY 401 – PUBLIC HISTORY WORKSHOP**

3 credits.

Introduction to the practice of public history. Public historians ground their work in rigorous, academic research with the goal of presenting history in a collaborative and publicly focused manner. These projects come in many forms including exhibits, walking tours, podcasts, documentaries, web projects, and place-based interpretation, to name a few. Learn how academic history gets presented to the public, not only by reading about public history, but by doing it.

**Requisites:** HISTORY 201 or 3 credits in HISTORY or HIST SCI**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY 403 – IMMIGRATION AND ASSIMILATION IN AMERICAN HISTORY**

3-4 credits.

Survey of immigration to the U.S. from colonial times to the present with analyses of the roles of ethnic and racial groups in economics and politics, the reactions of earlier arrivals to their successors, the extent of assimilation and contemporary ethnic and racial consciousness.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**HISTORY/RELIG ST 409 – CHRISTIANITY IN THE ATLANTIC WORLD, 1500-1800**

3 credits.

Between the late Middle Ages and the era of democratic revolutions Western Christianity saw a series of sweeping changes that altered its global profile and helped form the modern world - examines some of these shifts and their impact. Questions explored include: Why did the Reformations of the 16th century occur and with what effects on people's lives and on early modern societies? What was the relationship between European colonization, the Atlantic slave trade, new theories of race, and the spread of Christianity to the "New World"? How was the Christian religion resisted, received, and reshaped by Native Americans and people of African descent? What sparked movements of reform and renewal - including new Catholic religious orders and the Protestant Evangelical Awakening - and with what consequences for modern Christianity? How did the nature of Christian belief and identity change under the impact of religious conflict, political revolution, and new intellectual movements?

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**HISTORY 410 – HISTORY OF GERMANY, 1871 TO THE PRESENT**

3-4 credits.

Political and social development of Central Europe from the establishment of the German Empire to the post-World War II period.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HISTORY/RELIG ST 411 – THE ENLIGHTENMENT AND ITS CRITICS**

3 credits.

European intellectual history in the 17th and 18th centuries, from the Wars of Religion to the French Revolution. Examines the rise of Enlightenment thought in relation to political and religious conflict, revolutions in science and philosophy, and the emergence of the public sphere. Special attention is paid to the Enlightenment's relationship to religion and to contemporary critiques made of Enlightenment thinking, including those of the early Romantic movement.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HISTORY/ED POL 412 – HISTORY OF AMERICAN EDUCATION**

3 credits.

Examines the history of education in America from the colonization of North America to the present to consider education in its broadest sense - as a process of individual development and cultural transmission. Explores such topics as the rise of common schools in the urban North; the education of Native Americans, immigrants, slaves, and free blacks; the evolution of teacher training (primarily for women); various philosophies of "progressive" school reform; the politics of desegregation, bilingual education, and special education; the articulation between high school and college work; and the evolving federal role in American education.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY 417 – HISTORY OF RUSSIA**

3-4 credits.

Origins and evolution of the Russian people and state; political, economic, and social history; foreign relations as they affect domestic policy; from the ninth century to 1800.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HISTORY 418 – HISTORY OF RUSSIA**

3-4 credits.

Russian political, economic, and social history from 1800 to 1917; foreign relations as they affect domestic policy.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**HISTORY 419 – HISTORY OF SOVIET RUSSIA**

3-4 credits.

Major political, economic and social developments in Russia since 1917.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HISTORY 420 – RUSSIAN SOCIAL AND INTELLECTUAL HISTORY**

3-4 credits.

Main currents of Russian social thought in the eighteenth and nineteenth centuries.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/CHICLA/POLI SCI 422 – LATINO HISTORY AND POLITICS**

3 credits.

Students will examine the historical, social, political, economic, and cultural experiences and conditions of Latinos, one of the largest US racial/ethnic minority groups. Course focus is on people who trace their origins to Mexico, the Caribbean, and countries of Latin America.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HISTORY 424 – THE SOVIET UNION AND THE WORLD, 1917-1991**

3–4 credits.

Surveys Soviet foreign relations from 1917-1991, examining the causes, course, and outcome of the Cold War. Topics include: Soviet-US relations, World War II, the Socialist Bloc, espionage, the space race, Sino-Soviet relations, and Soviet intervention in the 'Third World.'

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 425 – HISTORY OF POLAND AND THE BALTIC AREA**

3–4 credits.

Northern part of East Central Europe, the territory included in the former Polish-Lithuanian Commonwealth.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**HISTORY/LEGAL ST 426 – THE HISTORY OF PUNISHMENT**

3–4 credits.

Examines punishment across a vast range of historical traditions, examining how wrongdoing and punishment have been figured in law, literature, art and philosophy. Examines ancient, medieval and modern traditions.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**HISTORY 427 – THE AMERICAN MILITARY EXPERIENCE TO 1902**

3–4 credits.

A survey of American military experience from the 16th century through the development of a nascent American "empire" at the turn of the 19th and 20th centuries, examining the influence of warfare on all aspects of American society.

**Requisites:** Sophomore standing. Not open to students with credit for HISTORY 345.**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY 428 – THE AMERICAN MILITARY EXPERIENCE SINCE 1899**

3–4 credits.

A survey of American military experience in the 20th and 21st centuries, examining the influence of warfare on all aspects of American society.

**Requisites:** Sophomore standing. Not open to students with credit for HISTORY 345.**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/ENVIR ST/LEGAL ST 430 – LAW AND ENVIRONMENT: HISTORICAL AND CONTEMPORARY PERSPECTIVES**

3 credits.

Explores environmental studies through a focus on law and legal history. Although its main concentration is on U.S. environmental law, the course will begin and end with broader historical and global perspectives. Topics include a survey of English, European, and early American legal approaches to land use, natural resources, and pollution through World War II as well as an examination of the development and practice of contemporary U.S. environmental law and consideration of the recent emergence of international environmental law.

**Requisites:** Sophomore standing**Course Designation:** Gen Ed – Communication Part B

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**HISTORY/SCAND ST 431 – HISTORY OF SCANDINAVIA TO 1815**

3 credits.

Political, social, economic, and cultural developments of Scandinavia through the "Viking Age" to the break-up of Sweden-Finland and Denmark-Norway; emphasis on the interplay between social and political forces and institutions and the area's relationship with the rest of Europe.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY/SCAND ST 432 – HISTORY OF SCANDINAVIA SINCE 1815**

3 credits.

Political, social, economic, and cultural development: political realignments and rise of nationalism, industrialization and rise of liberalism and socialism, democratization, independence struggles and social conflict, evolution of welfare states, World War II and its aftermath.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY 434 – AMERICAN FOREIGN RELATIONS, 1901 TO THE PRESENT**

3-4 credits.

America's relations with the world, emphasizing the economic, political and ideological elements determining policy.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/CHICLA 435 – COLONY, NATION, AND MINORITY: THE PUERTO RICANS' WORLD**

3 credits.

A historical introduction to the Puerto Rican experience, from island to mainland. Varieties of colonial rule, social institutions, cultural processes, and ethnic and national identity. Migration to the U.S. and social dynamics of stateside communities.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2013**HISTORY/ASIAN/RELIG ST 438 – BUDDHISM AND SOCIETY IN SOUTHEAST ASIAN HISTORY**

3-4 credits.

Theravada Buddhism in Southeast Asia; ideas and basic tenets; history and its impact on social and political institutions; the monastic order and relations with the states; roles in the early history up to the present; focus on Thailand, Burma and Cambodia. Not open to students with credit for LCA 438 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2014**HISTORY 441 – REVOLUTION AND CONFLICT IN MODERN LATIN AMERICA**

3-4 credits.

Comparative analysis of the relationship between socio-economic structure and political conflict in nineteenth and twentieth century Latin America. Cases are chosen to illustrate such outcomes as social revolution, authoritarian repression and electoral stalemate.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**HISTORY 444 – HISTORY OF EAST AFRICA**

3-4 credits.

Formation of ethnic groups, state building, the development of pre-colonial trade institutions, and African social and political history in the colonial period.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**HISTORY 445 – HISTORY OF EQUATORIAL AFRICA**

3-4 credits.

Area south of Lake Chad and north of Southwest Africa and Zambia from the advent of the Iron Age to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2015



**HISTORY 450 – MAKING OF MODERN SOUTH ASIA**

3–4 credits.

Everything you ever hear about South Asia is true. But the exact opposite is also true. Tradition and modernity, development and stagnation, the past and the future all exist simultaneously, at times in harmony and at other times in conflict with one another. Through an exploration of the political, social and economic history of this region from the 18th century to the present day, learn about the making of modern South Asia and attempt to understand this paradox.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/ASIAN 454 – SAMURAI: HISTORY AND IMAGE**

3–4 credits.

Japanese warriors, their ideals, and their images from the tenth century to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**HISTORY/ASIAN 456 – PEARL HARBOR & HIROSHIMA: JAPAN, THE US & THE CRISIS IN ASIA**

3–4 credits.

Events leading to the Pearl Harbor attack, the conduct of World War II in the Pacific, the nature of the wartime Japanese state and effects of the war on Japanese society, the dropping of the atomic bombs, and Japan's decision to surrender. The war as an epoch in Japanese history.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**HISTORY 457 – HISTORY OF SOUTHEAST ASIA TO 1800**

3–4 credits.

Formation and development of classical Indian and Chinese influenced societies in the area comprising present-day Burma, Thailand, Cambodia, Laos, Vietnam, Malaysia, Indonesia, and the Philippines, and their meeting with Islam and the early Europeans.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**HISTORY/ASIAN 458 – HISTORY OF SOUTHEAST ASIA SINCE 1800**

3–4 credits.

Effects of the modern Western revolution on the established societies of Southeast Asia through colonial rule and economic and cultural change. Not open to students with credit for LCA 458 prior to Fall 2018.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**HISTORY/LEGAL ST 459 – RULE OF LAW: PHILOSOPHICAL AND HISTORICAL MODELS**

3–4 credits.

From the perspectives of history and political theory, examines the multiple meanings of the idea of the rule of law, and its uses in American history. Explore prominent critiques of the rule of law ideal.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/ENVIR ST/GEOG 460 – AMERICAN ENVIRONMENTAL HISTORY**

4 credits.

Survey of interactions among people and natural environments from before European colonization to present. Equal attention to problems of ecological change, human ideas, and uses of nature and history of conservation and environmental public policy.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ASIAN 463 – TOPICS IN SOUTH ASIAN HISTORY**

3 credits.

Topics vary related to the History of South Asia, Eurasia, and the Indian Ocean.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018



**HISTORY/ENVIR ST 465 – GLOBAL ENVIRONMENTAL HISTORY**

3-4 credits.

Explores the history of human relationships with the environment on a global scale through analysis of long-term changes, from early civilizations, to the beginnings of global trade, the Industrial Revolution, urbanization, and 20th century technological developments. Offers first-hand historiographical research experience and training in writing for public web audiences.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY/ECON 466 – THE AMERICAN ECONOMY SINCE 1865**

3-4 credits.

Emergence of the large corporation; growth and instability since the mid-nineteenth century; increasing government participation in the economy; the impact of war, depression, discrimination, and international responsibilities.

**Requisites:** ECON 101 or 111

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/ENVIR ST/GEOG 469 – THE MAKING OF THE AMERICAN LANDSCAPE**

4 credits.

Surveys the historical geography and environmental history of the United States by tracing the evolution of the American landscape from precolonial times to the present, with special emphasis on developing skills to interpret landscape history.

**Requisites:** Sophomore standing or 3 credits in HISTORY, GEOG or ENVIR ST

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**HISTORY/LEGAL ST 476 – MEDIEVAL LAW AND SOCIETY**

3 credits.

Introduction to the central historical developments of law and legal institutions in the European middle ages (400-1500).

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/LEGAL ST 477 – HISTORY OF FORENSIC SCIENCE**

3 credits.

Examines the diverse paths followed by forensic science (including medical jurisprudence or forensic medicine) in various times and places, focusing on the English-speaking world from the nineteenth century until the present. Explore the many ways that law and science have worked together--or at cross-purposes--to generate and assess evidence at the crime scene, in the lab, in the courtroom, and beyond.

**Requisites:** Sophomore standing and (HISTORY/LEGAL ST/ HISTORY 261, LEGAL ST/SOC/LEGAL ST 131, or LEGAL ST/POLI SCI/ LEGAL ST 217), or graduate/professional standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY/ED POL 478 – COMPARATIVE HISTORY OF CHILDHOOD AND ADOLESCENCE**

3 credits.

Examines the growth of modern childhood and adolescent sub-cultures, class differences, literary and pictorial representations, legal and demographic developments, and the growth of educational theories and institutions.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HISTORY 500 – READING SEMINAR IN HISTORY**

3 credits.

Advanced exploration of selected topics, featuring small group discussion and intensive engagement with historical materials. Topics vary.

**Requisites:** HISTORY 201 or junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY/HIST SCI/MED HIST 507 – HEALTH, DISEASE AND HEALING I**

3-4 credits.

Medicine in Europe from antiquity to the 18th century, investigating changes in medical ideas, institutions, practices, and organization.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**HISTORY/HIST SCI/MED HIST 508 – HEALTH, DISEASE AND HEALING II**

3–4 credits.

Medicine in Europe from the 18th century to mid-20th century, investigating changes in disease and demography, state interest in health care, the medical professions, and both scientific and alternative medical ideas.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**HISTORY/LEGAL ST 510 – LEGAL PLURALISM**

3 credits.

Historical and anthropological perspectives on non-state "law," or systems of rules generated by normative orders that lay beyond the state; case studies include the mafia, Tokyo tuna traders' court, orthodox Jewish diamond merchants, California gold miners' courts, Inuit song dueling.

**Requisites:** Sophomore standing and (HISTORY/LEGAL ST/HISTORY 261, LEGAL ST/SOC/LEGAL ST 131, or LEGAL ST/POLI SCI/LEGAL ST 217), or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY/CURRIC/ED POL/JEWISH 515 – HOLOCAUST: HISTORY, MEMORY AND EDUCATION**

3 credits.

Explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms.

**Requisites:** Junior standing**Course Designation:** Gen Ed – Communication Part B

Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/CLASSICS/RELIG ST 517 – RELIGIONS OF THE ANCIENT MEDITERRANEAN**

3 credits.

Ancient religions in their political, social and cultural contexts; topics include ritual, literary and artistic representations, religious persecutions, and/or modern approaches to the study of ancient religions. Chronological and geographical focus will vary between Greece, Rome, Judaea and Egypt.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**HISTORY/JEWISH 518 – ANTI-SEMITISM IN EUROPEAN CULTURE, 1700-1945**

3 credits.

A critical review of major theories of anti-Semitism and a history of modern anti-Semitism.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**HISTORY/GEN&WS 519 – SEXUALITY, MODERNITY AND SOCIAL CHANGE**

3 credits.

A history of sexuality approach to a period of major social, economic, and political change in US history, 1880-1930; medical, legal, and popular discourses shaping urbanization, reform, nationalism and colonialism.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**HISTORY 533 – MULTI-RACIAL SOCIETIES IN LATIN AMERICA**

3–4 credits.

Genesis, evolution, and contradictions of racially heterogeneous societies, from European conquest to the present. Social history of Indians, Blacks, and Asians; relationships between racial, sexual, and class oppressions. Regional emphasis may vary.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015

**HISTORY/JOURN 560 – HISTORY OF U.S. MEDIA**

4 credits.

Evolution of the mass media in the United States in the context of political, social, and economic change.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/HIST SCI/MED HIST 564 – DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN**

3 credits.

Examines the history of illness and medical practice in Latin America and the Caribbean from the colonial era until the present. Using an interdisciplinary set of sources, students will explore the different meanings of disease, body normativity, medical practice, and ideas about public health across different historical circumstances in the region.

**Requisites:** Junior standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HISTORY/L I S 569 – HISTORY OF AMERICAN LIBRARIANSHIP**

3 credits.

Development of American librarianship from Colonial times to the present, with special reference to the relationship of library institutions to their contemporary social, economic, cultural and political environments.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HISTORY/SCAND ST 577 – CONTEMPORARY SCANDINAVIA: POLITICS AND HISTORY**

3-4 credits.

Social, economic, and ideological changes, institutions, and movements and their relationships with the political processes and structures in the Nordic states.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**HISTORY 600 – ADVANCED SEMINAR IN HISTORY**

3 credits.

Development and application of advanced research skills to a specific historical topic. Intensive writing and small group discussion results in a project demonstrating original or creative analysis of primary and secondary sources.

**Requisites:** HISTORY 201 or HIST SCI 211

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 601 – HISTORICAL PUBLISHING PRACTICUM**

3 credits.

Hands-on instruction and experience in historical publishing. Discussion of the nature of historical research and writing.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 607 – THE AMERICAN IMPACT ABROAD: THE HISTORICAL DIMENSION**

3 credits.

Analysis of diplomatic, economic, cultural, and social interaction of Americans with foreign peoples and nations.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HISTORY/ED POL 612 – HISTORY OF STUDENT ACTIVISM FROM THE POPULAR FRONT TO BLACK LIVES MATTER**

3 credits.

Explore the history of student activism in the United States, with an emphasis on the experiences racial/ethnic minority youths who have been marginalized or discriminated against. What motivated students to become politically active, and what forms did their activism take? How did student activism vary across time and space and from one group of activists to another? Why did some students become activists while others did not? What role did education and educational institutions play in their activism? What impact have student activists had, and what do their histories reveal about the capacity and mechanisms for achieving racial equity in particular and for affecting social, political, and economic change more broadly?

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**HISTORY/ED POL 622 – HISTORY OF RADICAL AND EXPERIMENTAL EDUCATION IN THE US AND UK**

3 credits.

Examines the comparative history of radical and experimental education in the United States and United Kingdom since 1800. It focuses on the social, cultural, and intellectual history of diverse educational experiments, including experiments related to socialism, abolitionism, anarchism, and religious fundamentalism.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**HISTORY/AFROAMER 628 – HISTORY OF THE CIVIL RIGHTS MOVEMENT IN THE UNITED STATES**

3 credits.

Civil rights history from 1930–1970. Legal, historical and economic origins of the civil rights movement. Study of the movement's impact on United States culture, politics, and international relations.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ART HIST/JOURN/LIS 650 – HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA**

3 credits.

History of books and print culture in the West from ancient times to the present. Focus on the influence of reading and writing on social, cultural, and intellectual life. Methodologies, theories, and sources for study of book and print culture history.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/ED POL 665 – HISTORY OF THE FEDERAL ROLE IN AMERICAN EDUCATION**

3 credits.

Examines the history of federal aid to education from 1776 to the present, with heavy emphasis on the post-World War II period. Explores the federal role in public education in the Early Republic and during Reconstruction; Traces the evolution of federal policies concerning racial desegregation, compensatory education for low-income students, bilingual education, and special education for the disabled. Critically reflect on the tradition of "local control," policy implementation and evaluation, accountability, block grants, interest groups and lobbies; nationally standardized testing, and the different goals assigned to public schooling in the United States (e.g., social integration/inclusion, individual academic achievement, etc.).

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**HISTORY/SOC 670 – CAPITALISM, SOCIALISM, AND DEMOCRACY IN AMERICA SINCE 1890**

3–4 credits.

Political institutional arrangements which have emerged since 1890 and how they have influenced social and economic policies implemented since the Second World War. Why the working class has been politically weak in America; policy consequences of this weakness.

**Requisites:** Junior standing and (SOC 181, CE SOC/SOC/C&E SOC 140, 210, 211, HISTORY 102 or 109), or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019

**HISTORY 680 – HONORS THESIS COLLOQUIUM**

2 credits.

Colloquium for honors thesis writers. Students must be concurrently enrolled in HISTORY 681 or 682, or HIST SCI 681 or 682, and be declared in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 681 – SENIOR HONORS THESIS**

1-3 credits.

Mentored independent research and thesis writing on an original topic for honors. Students must be concurrently enrolled in HISTORY 680 and be declared in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY 682 – SENIOR HONORS THESIS**

1-3 credits.

Mentored independent research and thesis writing on an original topic for honors. Requires completion of HISTORY 681. Must be concurrently enrolled in HISTORY 680.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HISTORY 690 – THESIS COLLOQUIUM**

2 credits.

Colloquium for thesis writers. Students must be concurrently enrolled in HISTORY 691 or 692.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 691 – SENIOR THESIS**

1-3 credits.

Mentored independent research and writing on an original topic. Students must be concurrently enrolled in HISTORY 690.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**HISTORY 692 – SENIOR THESIS**

1-3 credits.

Mentored research and writing on an original topic. Requires completion of HISTORY 691. Must be concurrently enrolled in HISTORY 690.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**HISTORY 698 – DIRECTED STUDY**

1-4 credits.

Directed study under the supervision of a faculty member. Graded on a Cr/N basis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**HISTORY 699 – DIRECTED STUDY**

1-4 credits.

Directed study under the supervision of a faculty member. Graded on a lettered basis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 700 – PROSEMINAR: TRADITIONAL & EARLY MODERN CHINESE INTELLECTUAL HISTORY**

3 credits.

The major problems of historical interpretations in Chinese intellectual history from the classical period to 1840 on the basis of English translations of primary sources and English-language secondary sources. Topics vary.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HISTORY 701 – HISTORY IN A GLOBAL PERSPECTIVE**

1 credit.

Introduction to the ways of thinking characteristic of historical study and to the questions and methods that motivate the research fields in which department faculty work. Foundational instruction for PhD and History of Science, Medicine, and Technology PhD taken during the first semester of those programs.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 703 – HISTORY AND THEORY**

3 credits.

Explorations of the role of theory in historical research and writing. Content varies.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 704 – TOPICS IN CONTEMPORARY HISTORY**

3 credits.

Studies two or more nations or defined regions through a comparison of a single theme or set of themes in their history.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**HISTORY 705 – TOPICS IN GLOBAL HISTORY**

3 credits.

Examines the significance of a particular historical phenomenon from the perspective of its importance world-wide.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**HISTORY 706 – TOPICS IN TRANSNATIONAL HISTORY**

3 credits.

Examines the significance of a particular event, phenomenon or question across national borders and in terms of the history of nation-state formation.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HISTORY 707 – PROSEMINAR IN EARLY MODERN EUROPEAN HISTORY, 1500-1789**

3 credits.

Readings and/or research on the social, cultural, and political history of France from the late seventeenth century through the French Revolution.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**HISTORY 710 – PROFESSIONAL DEVELOPMENT SEMINAR**

3 credits.

Topics in professional development for historians with an emphasis on building skills that are valuable both inside and outside the academy, such as managing the writing process, teaching college history, or communicating historical research to a broad, nonspecialist audience. Content varies.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY/AFROAMER/ED POL 712 – EDUCATION AND THE CIVIL RIGHTS MOVEMENT**

3 credits.

Explores the historical relationship between education and the African American freedom struggle from the early twentieth century to the present. Topics include school segregation, desegregation, and resegregation; high school and college student activism; Black Power; civil rights protest strategies and tactics, and the role of the federal government.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**HISTORY/ED POL 713 – HISTORY OF HIGHER EDUCATION IN EUROPE AND AMERICA**

3 credits.

Development of colleges, universities, and higher learning in Europe and America.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019



### **HISTORY/POLI SCI/PUB AFFR 724 – THE POLITICS OF PERSUASION: SOFT POWER IN EUROPE AND THE U.S.**

1-3 credits.

How powerful is non-military power? What are its vectors and its limits? International relations theorists have defined soft power as "the ability to get what you want through attraction rather than coercion." This graduate seminar will put this notion to the test. We will investigate how elites, interest groups, religious bodies, and nation-states seek to exercise hegemony in the international order through non-violent means. How was "soft power" implemented on the ground in the 20th century- and how did its use transform international relations? To probe these questions, we will focus on a series of case studies in European and U.S. international history. Topics covered include the expansion of capitalism and consumer culture; the globalization of international legal instruments and human rights claims; and de-secularization, religious radicalism, and counter-insurgency. In the process of analyzing our case studies, we will refine our analytical vocabulary. Drawing on recent work in international relations, political theory, and international history, we will probe the meaning and utility of concepts like normative power, hegemony, cultural capital, and public diplomacy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **HISTORY 725 – SEMINAR IN EAST ASIAN HISTORY**

1-3 credits.

Major problems of historical interpretation in the early modern and recent histories of China, Japan, and Korea. Topics and periods of emphasis vary each year.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

### **HISTORY 730 – PROSEMINAR IN LATIN AMERICAN HISTORY**

1-3 credits.

Historical literature of significant topics in Latin American history. The colonial period, Brazilian history, and Spanish-America in the national period.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### **HISTORY/L I S 734 – INTRODUCTION TO ARCHIVES AND RECORDS MANAGEMENT**

3 credits.

An introduction to the archives profession and basic theory and practice of archives and records administration, including the uses of primary sources in research, appraisal, access, and preservation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HISTORY 752 – SEMINAR IN TRANSNATIONAL GENDER HISTORY**

3 credits.

Themes in Gender and Women's History within a transnational context.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **HISTORY 753 – SEMINAR-COMPARATIVE WORLD HISTORY**

1-3 credits.

Topics significant for the histories of Latin America, Africa, Islamic core, South Asia and Southeast Asia. A single topic chosen each semester for a series of comparative essays by seminar members.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **HISTORY 755 – PROSEMINAR IN SOUTHEAST ASIAN HISTORY**

1-3 credits.

Introductory seminar in modern Southeast Asian history; work mostly in English-language sources.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **HISTORY/ANTHRO/ART HIST/DS/LAND ARC 764 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 790 – PROSEMINAR: EMPIRE AND COLONIALISM IN SOUTH ASIA**

3 credits.

Designed to develop historiographic command of colonial and postcolonial South Asian history as a teaching and research field. Carefully explores the master narratives or "schools" of historiography of South Asia, and analyzes the erasures as well as the normative theoretical and archival axes around which the sub-field has developed. Topics include pre-colonial modes of representing the past; the social, cultural and economic turns in colonial and nationalist historiography; legal and environmental historiographical methods; South Asia in the world/global South Asia.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**HISTORY 800 – RESEARCH SEMINAR IN HISTORY**

3 credits.

Introduction to the life of a professional historian, to different styles and methods of history. Opportunity to present one's findings in a conference-type setting. Structured to support completion of the research paper requirement for the History MA, regardless of specialty.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**HISTORY/CLASSICS 801 – SEMINAR-ANCIENT HISTORY**

1-3 credits.

Special problems in Greek and Roman history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**HISTORY/FRENCH/GERMAN/POLI SCI/SOC 804 – INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 805 – SEMINAR-MEDIEVAL HISTORY**

1-3 credits.

Topics in Medieval history.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**HISTORY/JOURN 808 – MASS COMMUNICATION HISTORY**

3 credits.

Intensive reading and discussion designed to introduce literature of mass communication.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**HISTORY 829 – RESEARCH SEMINAR IN LATIN AMERICAN HISTORY**

1-3 credits.

Research on topics in Latin American history. Special attention to methods of source analysis.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**HISTORY 845 – SEMINAR-CENTRAL EUROPEAN HISTORY**

1-3 credits.

Modern German history and the history of Central Europe.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**HISTORY 849 – SEMINAR-TOPICS IN HISTORY OF IMPERIAL RUSSIA, 1649-1917**

1-3 credits.

Historiography and problems in the domestic, political, social, economic and cultural history of the Russian Empire to 1917 and of Southeast Europe to the present.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**HISTORY 850 – SMR-HIST OF THE SOVIET UNION & MODERN HIST OF E CENTRAL EUROPE**

1-3 credits.

Development of the Soviet Union since 1917 and the political and diplomatic history of the nations lying between Russia and Germany.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020

**HISTORY 854 – SEMINAR IN MODERN CHINESE HISTORY**

1-3 credits.

Chinese history in the nineteenth and twentieth centuries, with emphasis on intellectual history and the history of Chinese Communism.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**HISTORY 855 – SEMINAR IN JAPANESE HISTORY**

1-3 credits.

Research seminar in Japanese history. Focus varies each year.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HISTORY/ASIAN 857 – SEMINAR-HISTORY OF INDIA (SOUTH ASIA)**

1-3 credits.

Emphasis upon handling of research problems. Focus upon methods, resources, intellectual approaches, and changing interpretations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**HISTORY 861 – SEMINAR-THE HISTORY OF AFRICA**

1-3 credits.

Research studies in aspects of African history with emphasis on field research techniques and interpretation of non-archival data.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY 867 – SEMINAR-EUROPEAN SOCIAL & INTELLECTUAL HISTORY**

1-3 credits.

Subject matter varies every semester and alternates between the early modern and modern period.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**HISTORY 868 – SEMINAR IN MODERN FRENCH HISTORY**

1-3 credits.

Social, political, and cultural history of France, 1800 to the present.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**HISTORY 891 – PROSEMINAR IN MODERN EUROPEAN HISTORY**

1-3 credits.

History of Europe since 1500.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**HISTORY 900 – INTRODUCTION TO HISTORY FOR U.S. HISTORIANS**

3 credits.

A survey of U.S. history by period and field with extensive discussion on how to plan a successful career as a historian. Designed to introduce masters and doctoral graduate students in the United States History field of study to the U.S. history faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY 901 – STUDIES IN AMERICAN HISTORY**

1-3 credits.

Reading seminar in American history. Topics and periods of emphasis vary.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HISTORY/ED POL 903 – HISTORY OF EDUCATION OF MULTICULTURAL AMERICA**

3 credits.

Selected topics, issues and themes concerning the history of education of various groups of people of color in the United States, as well as selected issues, topics and themes focusing on immigration and ethnicity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HISTORY/ED POL 906 – PROSEMINAR ON THE HISTORY OF EDUCATION**

3 credits.

Reading in European or American educational history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY/ED POL 907 – SEMINAR-HISTORY OF EDUCATION**

1-3 credits.

Studies in European and American educational history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**HISTORY 910 – HISTORY OF COLONIAL NORTH AMERICA**

3 credits.

The history of North America from the fifteenth through eighteenth centuries, with the primary focus on Anglo-America.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**HISTORY 925 – SEMINAR-AMERICA IN THE CIVIL WAR ERA**

2-3 credits.

Politics, society, and economics from the sectional crisis through the fall of southern reconstruction.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**HISTORY/GEOG 932 – SEMINAR IN AMERICAN ENVIRONMENTAL HISTORY**

3 credits.

Surveys recent and classic works on American environmental history to introduce students to the methods and historiography of the field.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**HISTORY 936 – THE HISTORY OF WOMEN AND GENDER IN THE U.S., TO 1870**

3 credits.

Surveys key theoretical work and secondary literature on the history of women and gender in the United States to 1870.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY/GEN&WS 938 – HISTORY OF SEXUALITY**

3 credits.

Using sexuality as a category of historical analysis, examines historiographical, methodological, and theoretical contributions to understanding all aspects of the past.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**HISTORY 940 – SEMINAR-AMERICAN HISTORY 1900-1945**

3 credits.

Readings and research on United States History, 1900-1945.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**HISTORY/AMER IND 941 – INDIANS AND EMPIRES**

3 credits.

Examining the centuries of imperial competition in Native America, explores recent developments in early American Indian history.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**HISTORY 943 – RACE & NATIONALISM: COMPARATIVE & THEORETICAL PERSPECTIVES**

3 credits.

Historical intersections of race and nationalisms. Explores questions of the origin of race and nationalisms, the position and status of a variety of nationalisms and anti-colonial nationalisms; and the contemporary debates over postmodernism, postindustrialism, postcolonialism, and multiculturalism.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021

**HISTORY 951 – SEMINAR-INTELLECTUAL HISTORY OF AMERICA**

1-3 credits.

Readings on the intellectual history of the United States/North America.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2018**HISTORY 952 – SEMINAR IN COMPARATIVE HISTORY**

2-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY 958 – SEMINAR-AMERICAN MILITARY HISTORY**

1-3 credits.

Readings on U.S. military history.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**HISTORY/RELIG ST 963 – AMERICAN RELIGIOUS HISTORY TO 1860**

3 credits.

The creation of a national religious culture from the earliest settlements to the mid-nineteenth century.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**HISTORY 978 – TEACHING COLLEGE HISTORY: INTRODUCTION TO UNDERGRADUATE PEDAGOGY**

2 credits.

Embracing the art of teaching as a key skill, and acknowledging that the desire to teach is one of the main motivations for graduate study, translates passion for history and humanities education into practical skills for classroom success. Explores how research on learning and teaching can be leveraged to maximize positive impact on student learning, create meaningful learning experiences for all students, grade effectively, fairly, and efficiently while minimizing time commitments and frustrations. Learn how to preemptively avoid problems and enable undergraduate success. Develop techniques for reaching all students where they are and helping them develop as historians and thinkers.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**HISTORY/SOC/URB R PL 979 – SEMINAR IN URBAN HISTORY**

3 credits.

Causes and consequences of urbanization, stressing social and economic aspects of major population movements, with particular attention to the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**HISTORY/A A E/ANTHRO/C&E SOC/GEOG/LACIS/POLI SCI/ PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**HISTORY/AFRICAN/ANTHRO/ECON/GEOG/POLI SCI 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**HISTORY 990 – RESEARCH AND THESIS**

1-9 credits.

Independent research and writing of a thesis under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HISTORY 999 – INDEPENDENT WORK**

1-6 credits.

Directed study under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



# HISTORY OF SCIENCE (HIST SCI)

## **HIST SCI/ENVIR ST/HISTORY 125 – GREEN SCREEN: ENVIRONMENTAL PERSPECTIVES THROUGH FILM**

3 credits.

From Teddy Roosevelt's 1909 African safari to the Hollywood blockbuster King Kong, from the world of Walt Disney to The March of the Penguins, cinema has been a powerful force in shaping public and scientific understanding of nature throughout the twentieth and twenty-first century. How can film shed light on changing environmental ideas and beliefs in American thought, politics, and culture? And how can we come to see and appreciate contested issues of race, class, and gender in nature on screen? Explore such questions and come to understand the role of film in helping to define the contours of past, present, and future environmental visions in the United States, and their impact on the real world struggles of people and wildlife throughout the world.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

## **HIST SCI/HISTORY/MED HIST 132 – BEES, TREES, GERMS, AND GENES: A HISTORY OF BIOLOGY**

3 credits.

How did today's biology emerge out of the diverse traditions of agriculture and natural history (bees and trees), biomedicine and molecular biology (germs and genes), which stretch back into the eighteenth century? Examines classic texts and "game-changers" in the history of biology, putting them into broader scientific and social contexts to see how these different ways of knowing intertwined, competed, and yielded novel approaches to the study of life that still shape today's life sciences.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## **HIST SCI 133 – BIOLOGY AND SOCIETY, 1950 – TODAY**

3 credits.

From medical advancements to environmental crises and global food shortages, the life sciences are implicated in some of the most pressing social issues of our time. Explores events in the history of biology from the mid-twentieth century to today, and examines how developments in this science have shaped and are shaped by society. Investigates the origins of the institutions, technologies, and styles of practice that characterize contemporary biology, such as the use of mice as "model organisms" for understanding human diseases. Examines biological controversies such as the introduction of genetically modified plants into the food supply. Explores how biological facts and theories have been and continue to be used as a source for understanding ourselves.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## **HIST SCI 150 – THE DIGITAL AGE**

3 credits.

An introduction to the history of the computer from the 1940s to the present day, major developments in computer science and technology in their historical contexts, and recent trends in computing and society. We learn about machines, but emphasize the study of people: the institutions, scientists, workers, and social movements that invented, facilitated, and transformed digital technology in the 20th and early 21st century.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## **HIST SCI 160 – ENGINEERING INEQUALITY: TECHNOLOGY AND INEQUITY THROUGHOUT HISTORY**

3–4 credits.

Offers an introduction to the history of technology centered around the relationship between technology and various forms of social inequality. Addresses: 1) how gendered, racial, and class-based disparities have shaped the history of technology; 2) how forms of engineered inequity have intersected with state-building, colonial projects, environmental degradation, and revolutionary programs; 3) how technology has been implicated in attempts to imagine a more just society. Introduces central themes and concepts in the histories of science, medicine, and especially technology. Examines case-studies that are transnational in scope and move chronologically from the 17th century to the present. Also gives significant attention to histories of technology that originated outside of the U.S. and Europe.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**HIST SCI/HISTORY 171 – HISTORY OF MEDICINE IN FILM**

3-4 credits.

Considers the social and cultural history of 20th and early 21st century American medicine through the depiction of health care practitioners and health care systems in Hollywood movies. View films that featured medicine, doctors, nurses, patients, and hospitals. Using these films as primary sources, seek to place these representations into a broader social and cultural context. Evaluate the extent to which popular understandings of medicine, health, and healing as portrayed in the films corresponded to actual practices of medicine and medical research at the time the films were first screened for mass audiences.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**HIST SCI 180 – FRESHMAN HONORS SEMINAR: HISTORY OF SCIENCE, TECHNOLOGY AND MEDICINE**

3 credits.

Introduction to the history of science, technology and medicine through in-depth examination of a specific theme or topic.

**Requisites:** Declared in an Honors program**Course Designation:** Breadth – Humanities Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2016**HIST SCI 201 – THE ORIGINS OF SCIENTIFIC THOUGHT**

3 credits.

Emergence of scientific method and scientific modes of thought out of ancient philosophical and religious traditions; the impact of ancient science on medieval Christendom; the origins and development of the Copernican-Newtonian world view.

**Requisites:** Not open to students with credit for ILS 201 or HIST/HIST SCI/HISTORY 323**Course Designation:** Breadth – Humanities Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HIST SCI 202 – THE MAKING OF MODERN SCIENCE**

3 credits.

Major trends and developments in the sciences from the 17th century to the early 20th century. Emphasis on those with broad cultural and social implications.

**Requisites:** None**Course Designation:** Breadth – Humanities Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HIST SCI 203 – SCIENCE IN THE TWENTIETH CENTURY: A HISTORICAL OVERVIEW**

3 credits.

Major themes in the physical, biological and environmental sciences from 1890 to the present, with attention to conceptual development, interaction of science and society, philosophical issues, and personalities in science.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**HIST SCI/ASTRON 206 – HISTORY OF ASTRONOMY AND COSMOLOGY**

3 credits.

The development of astronomical knowledge and cosmological views from the earliest times to the present, viewed in their social, philosophical, and technological contexts.

**Requisites:** None**Course Designation:** Breadth – Humanities Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**HIST SCI 211 – THE HISTORIAN'S CRAFT: SCIENCE, MEDICINE, AND TECHNOLOGY**

3-4 credits.

Conduct original historical research in the fields of history of science, medicine, or technology and convey the results to others. Become historical detectives through engagement with archival materials and disciplinary methodologies in the histories of science, medicine and technology; practice defining important historical questions, collecting and analyzing evidence, presenting original conclusions, and contributing to ongoing discussions. Confer individually with and receive feedback from instructors to improve skills of historical analysis and communication in written and other formats. May not be repeated for credit.

**Requisites:** Satisfied Communications A requirement. Not open to students with credit for HISTORY 201**Course Designation:** Gen Ed – Communication Part B Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**HIST SCI/MED HIST 212 – BODIES, DISEASES, AND HEALERS: AN INTRODUCTION TO THE HISTORY OF MEDICINE**

3 credits.

A survey of different conceptions of how the body as a site of sickness has been understood from Antiquity to contemporary medicine. Includes consideration of the origins and evolution of public health, the changing social role of healers, and the emergence of the modern "standardized" body in health and illness.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HIST SCI/ENVIR ST 213 – GLOBAL ENVIRONMENTAL HEALTH: AN INTERDISCIPLINARY INTRODUCTION**

3 credits.

Provides an introduction to the intersections of health and environment on a global scale. Exposes students to a range of problems in global environmental health, including climate change, disease ecology, and the globalization of disease.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HIST SCI/MED HIST 218 – HISTORY OF TWENTIETH CENTURY AMERICAN MEDICINE**

3 credits.

Introduction to the development of the modern American medical care system.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HIST SCI 222 – TECHNOLOGY AND SOCIAL CHANGE IN HISTORY**

3 credits.

Topics in the history of technology. Themes include the social basis of technical change, the impact of technology on everyday life, and ethical issues in technology in the last four centuries.

**Requisites:** Sophomore standing or 3 credits in HISTORY or HIST SCI**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**HIST SCI/C&E SOC 230 – AGRICULTURE AND SOCIAL CHANGE IN WESTERN HISTORY**

3 credits.

Agricultural practices and social history from prehistoric times to the present. Topics include origins of agriculture, feudalism, agriculture in the Industrial Revolution, farming in America, and the consequences of the Green Revolution.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**HIST SCI 250 – SPECIAL TOPICS IN HISTORY OF SCIENCE (INTRODUCTORY)**

3 credits.

Special topics in the history of science, medicine, and technology.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2020**HIST SCI/AFROAMER 275 – SCIENCE, MEDICINE, AND RACE: A HISTORY**

3-4 credits.

Surveys the medical and scientific constructions of categories of race, placing the development of racial theories in a broad social and political context. Pays particular attention to the importance of racial science in slavery and colonialism.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HIST SCI 280 – HONORS SEMINAR: STUDIES IN SCIENCE, TECHNOLOGY, MEDICINE**

3 credits.

Intensive exploration of issues in the history of science. Emphasis on developing critical thinking about science through formal and informal writing.

**Requisites:** Satisfied Communications A requirement and declared in an Honors program**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2022

**HIST SCI/MED HIST 284 – PHYSICIAN IN HISTORY (HONORS)**

1 credit.

A survey of different conceptions of how the body as a site of sickness has been understood from Antiquity to contemporary medicine. Includes consideration of the origins and evolution of public health, the changing social role of healers, and the emergence of the modern "standardized" body in health and illness.

**Requisites:** Declared in an Honors program and concurrent enrollment in HIST SCI/MED HIST/HIST SCI 212

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**HIST SCI 286 – HONORS SEMINAR: STUDIES IN SCIENCE, TECHNOLOGY, MEDICINE**

3 credits.

Intensive exploration of issues in the history of science. Emphasis on developing critical thinking about science through discussion of readings and written exercises.

**Requisites:** Declared in an Honors program

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**HIST SCI/HORT 301 – (HORT)CULTURAL ROOTS: HUMAN HISTORIES OF PLANTS AND SCIENCE**

4 credits.

Dig into the history of plant sciences to understand why plants and humans have the relationships they do today. Focus on the experiences of Indigenous Americans and People of Color to understand the roots of inequities in horticulture, agriculture, and other plant sciences. Practice skills as a translator of science and history through engagement with scientific publications, library resources, and archival materials. Define important societal questions, collect and analyze evidence, present original conclusions, and contribute to ongoing discussions about the relationship of people and plants. Includes intensive writing and oral presentations.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HIST SCI/ECON 305 – DEVELOPMENT OF ECONOMIC THOUGHT**

3-4 credits.

Development of economic thought from the middle ages to the present; emphasis on major schools of thought including Classical, Marxian, Neo-Classical, and Keynesian schools.

**Requisites:** (ECON 101 and 102) or (A A E 215 and ECON 102) or ECON 111

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**HIST SCI/MEDIEVAL 322 – ANCIENT AND MEDIEVAL SCIENCE**

3 credits.

Scientific ideas and institutions from the beginnings of Greek philosophy to the Renaissance.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**HIST SCI/HISTORY 323 – THE SCIENTIFIC REVOLUTION: FROM COPERNICUS TO NEWTON**

3 credits.

An introduction to the formative period of modern science, including major ideas and events in the physical and life sciences from Copernicus to Newton.

**Requisites:** Junior standing or (graduate/professional standing and concurrent enrollment in HIST SCI 623)

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HIST SCI/HISTORY 324 – SCIENCE IN THE ENLIGHTENMENT**

3 credits.

Development and triumph of Newton's gravitational law; the conceptual revolution in chemistry; earth history and the move from religious to natural cosmologies.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**HIST SCI/MED HIST/RELIG ST 331 – SCIENCE, MEDICINE AND RELIGION**

3 credits.

Introduction to the study of religion, science, and medicine. Focus on how religion, science, and medicine have shaped practices of knowledge production and meaning making with respect to human life, by considering theories of human history and racial progress; how logics of contagion structure human relationships and communal boundaries; the variety of ways of understanding and caring for bodies; and the place of humans within broader ecologies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**HIST SCI/MED HIST 333 – HISTORY OF MODERN BIOLOGY**

3 credits.

Exploration of major developments in biology and related sciences ca. 1700. Topics may draw from morphology, embryology, and cell biology; evolution, ecology, and genetics; physiology, microbiology, and recent experimental biology.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HIST SCI 343 – THE DARWINIAN REVOLUTION**

3 credits.

Scientific, social, religious and related dimensions of the evolution hypothesis from pre-darwinian speculation and Darwin's own work to later support, criticism and continuing investigation. Coverage reaches into the twentieth century.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**HIST SCI 350 – SPECIAL TOPICS IN THE HISTORY OF SCIENCE**

2-3 credits.

Readings/discussion of varying topics in History of Science, Medicine, and Technology.

**Requisites:** Sophomore standing or 3 credits in HIST SCI**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HIST SCI/ENVIR ST 353 – HISTORY OF ECOLOGY**

3 credits.

The development of the science of ecology and related scientific issues and social attitudes, with a primary emphasis on developments from the late nineteenth century to the present.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**HIST SCI/ENVIR ST/RELIG ST 356 – ISLAM, SCIENCE & TECHNOLOGY, AND THE ENVIRONMENT**

3-4 credits.

Survey of Muslim religious understandings of science, technology, nature and environment. Gain a global perspective through case studies, covering sources such as the Qur'an, theology and law, and traditions of esoteric piety (mysticism), and historical and contemporary issues like medical ethics, virtual realities, and environmental change, challenge and crisis.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**HIST SCI 360 – HEALTH INEQUALITIES IN THE LONG 20TH CENTURY**

3 credits.

Analyze historical factors impacting healthcare cost, access, and services with focus on social determinants of health in the United States across the long 20th century. Evaluate current state of the field through literature reviews and conversations with guest lecturers. Apply historical analysis in consideration of current disparities in health resources. Produce original research project and policy proposal at intersection of public health, medical history, and health law and policy.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**HIST SCI/HISTORY/MED HIST 394 – SCIENCE IN AMERICA**

3 credits.

From the colonial period to the present; emphasis on the development of scientific institutions and the influence of science on American life.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017

**HIST SCI/S&A PHM 401 – HISTORY OF PHARMACY**

2 credits.

Pharmaceutical field, from antiquity to modern medical care; professional; structuring in principal countries of the West.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HIST SCI 404 – A HISTORY OF DISEASE**

3-4 credits.

What is disease? Who decides? What are the consequences of labeling a behavior a disease? Can disease be a tool of liberation? Can disease be an instrument of oppression? How do race, class, and gender affect our understandings of and experiences with illness? How have diseases shaped American history? Illustrates the various ways disease operates in America and examines the role of disease on at least four levels--political, social, cultural, and personal--to demonstrate that diseases are not merely bodily afflictions; they are also participants in the body politic. Each disease covered is chosen to illustrate a different point about the social and cultural lives of disease in the history of the United States. Though diseases are covered in a chronological fashion, this coverage is not meant as a narrative history of disease.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HIST SCI/MATH 473 – HISTORY OF MATHEMATICS**

3 credits.

An historical survey of the main lines of mathematical development.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Either Humanities or Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HIST SCI/HISTORY/MED HIST 507 – HEALTH, DISEASE AND HEALING I**

3-4 credits.

Medicine in Europe from antiquity to the 18th century, investigating changes in medical ideas, institutions, practices, and organization.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**HIST SCI/HISTORY/MED HIST 508 – HEALTH, DISEASE AND HEALING II**

3-4 credits.

Medicine in Europe from the 18th century to mid-20th century, investigating changes in disease and demography, state interest in health care, the medical professions, and both scientific and alternative medical ideas.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HIST SCI/MED HIST 509 – THE DEVELOPMENT OF PUBLIC HEALTH IN AMERICA**

3 credits.

Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HIST SCI/GEOSCI 514 – HISTORY OF GEOLOGIC THOUGHT**

3 credits.

Major concepts from earliest to modern times.

**Requisites:** GEOSCI 204 or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**HIST SCI/AFROAMER/MED HIST 523 – RACE, AMERICAN MEDICINE AND PUBLIC HEALTH**

3 credits.

Provides historical perspectives on current dilemmas facing black patients and health care professionals.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HIST SCI/ENGL/MED HIST 525 – HEALTH AND THE HUMANITIES**  
3 credits.

Explores how a humanistic perspective can broaden our understanding of health and medicine. Specifically, we will examine the role of language and culture in the creation and circulation of biomedical knowledge; our lived experiences with illness (physical and mental); the intricate intersections of race, gender, sexuality, disability and medicine; the political dimensions of diagnosis, disease, and epidemics, and the role that fiction, creative non-fiction, comics, and film play in shaping our experiences with health and medicine as health care providers and as patients. The course does not assume any background in science or medicine. One of our recurrent topics, in fact, will be to consider how non-experts interact with medicine and its technical vocabularies. Although the primary objective of the course is to understand the cultural, social, and political dimensions of health and medicine, a secondary objective is for students to become more savvy patients and, for the few students who might emerge on the other side of the stethoscope one day, more well rounded health care professionals.

**Requisites:** Declared in the Health and the Humanities certificate

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HIST SCI/GEN&WS/MED HIST 531 – WOMEN AND HEALTH IN AMERICAN HISTORY**  
3 credits.

Women as patients and as health professionals in America from the colonial period to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HIST SCI/GEN&WS/MED HIST 532 – THE HISTORY OF THE (AMERICAN) BODY**  
3 credits.

This course demonstrates that human bodies have social and cultural histories. It will highlight the social values placed on different bodies, the changing social expectations bodies create, and the role of science and medicine in creating the cultural meanings of bodies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HIST SCI/GEN&WS 537 – CHILDBIRTH IN THE UNITED STATES**  
3 credits.

Using a reproductive justice framework, analyze contexts, experiences, practices, ideologies, and historiographies of childbirth in the United States from roughly the 17th century to the present, with the heaviest emphasis on the 20th and 21st century. Examines the ways that colonization, genocide, enslavement, racism, capitalism, heterosexism, patriarchy, and ableism have shaped all of these aspects of childbirth. Inquire how key movements and groups resisting some of these forms of oppression have had the power to reshape birth, as well as locating in birth a source of transformational power.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HIST SCI/MED HIST/POP HLTH 553 – INTERNATIONAL HEALTH AND GLOBAL SOCIETY**  
3 credits.

Major problems in international health from 1750 to the present. Focus on disease epidemiology and ecology; political economy of health; migration; quarantine; race, ethnicity, and health care; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**HIST SCI 555 – UNDERGRADUATE SEMINAR IN HISTORY OF SCIENCE**  
3 credits.

Advanced research in History of Science.

**Requisites:** HISTORY 201 or 3 Credits in HIST SCI

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**HIST SCI/HISTORY/MED HIST 564 – DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN**  
3 credits.

Examines the history of illness and medical practice in Latin America and the Caribbean from the colonial era until the present. Using an interdisciplinary set of sources, students will explore the different meanings of disease, body normativity, medical practice, and ideas about public health across different historical circumstances in the region.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019



### **HIST SCI/ENGL/MED HIST 599 – DIRECTED STUDY IN HEALTH AND THE HUMANITIES**

1 credit.

Offers students enrolled in the Health and the Humanities certificate an opportunity to conduct independent research under the guidance of a faculty member. It allows students who have enrolled in or completed a Health and the Humanities Capstone an opportunity to go into greater depth on a topic covered in the capstone course. In consultation with a faculty member, students will design a project that builds on lessons learned or work completed as part of their capstone experience.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **HIST SCI 615 – THE HISTORY OF EVOLUTIONARY THOUGHT**

3 credits.

Biological and geological foundations, preliminary speculations, the Darwinian synthesis, and its substantiation.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### **HIST SCI 623 – STUDIES IN EARLY MODERN SCIENCE**

1 credit.

Advanced readings in primary and secondary literature of the history of the 16th-17th century European science, with emphasis on current historiographic issues.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **HIST SCI/MED HIST 668 – TOPICS IN HISTORY OF MEDICINE**

3 credits.

Upper-level special topics course in the history of medicine.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

### **HIST SCI 681 – SENIOR HONORS THESIS**

3 credits.

Honors thesis on topics in History of Science, Medicine, and Technology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

### **HIST SCI 682 – SENIOR HONORS THESIS**

3 credits.

Honors thesis on topics in History of Science, Medicine, and Technology. Continuation of HIST SCI 681.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **HIST SCI 691 – SENIOR THESIS**

3 credits.

Senior thesis on topics in History of Science, Medicine, and Technology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2007

### **HIST SCI 692 – SENIOR THESIS**

3 credits.

Senior thesis on topics in History of Science, Medicine, and Technology. Continuation of HIST SCI 691.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2008

### **HIST SCI 698 – DIRECTED STUDY**

1-3 credits.

Directed study under the supervision of a faculty member on topics in History of Science, Medicine, and Technology. Graded on a Cr/N basis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

### **HIST SCI 699 – DIRECTED STUDY**

1-3 credits.

Directed study under the supervision of a faculty member on topics in History of Science, Medicine, and Technology. Graded on a lettered basis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**HIST SCI 720 – PROSEMINAR: HISTORIOGRAPHY AND METHODS**  
3 credits.

Philosophies, methods, and sources in the history of science, and their relations to the current state of scholarship.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HIST SCI 903 – SEMINAR: MEDIEVAL, RENAISSANCE, AND 17TH CENTURY SCIENCE**  
3 credits.

Readings and/or research on the history of medieval, Renaissance, and/or 17th-century science. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HIST SCI 907 – SEMINAR: HISTORY OF TECHNOLOGY**  
3 credits.

Research and readings on a topic of current interest in history of technology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HIST SCI 909 – HISTORY OF BIOLOGY AND MEDICINE**  
3 credits.

Readings and/or research on the history of biology and medicine. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**HIST SCI 911 – SEMINAR-EIGHTEENTH CENTURY SCIENCE**  
3 credits.

Readings and/or research on the history of science in the 18th century. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HIST SCI/MED HIST 919 – GRADUATE STUDIES IN MEDICAL HISTORY**  
3 credits.

Analyzes the scientific and social aspects of the development of modern medicine and public health in Europe and America.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**HIST SCI 921 – SEMINAR-SPECIAL TOPICS**  
3 credits.

Readings and/or research on the history of science, medicine, and technology. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**HIST SCI 925 – SEMINAR: RESEARCH AND THESIS**  
1-3 credits.

Readings and/or research on History of Science, Medicine, and Technology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**HIST SCI 950 – HISTORY OF SCIENCE COLLOQUIUM**  
0-1 credits.

Readings/discussion of varying topics in History of Science, Medicine, and Technology.

**Requisites:** Declared in History of Science, Medicine and Technology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**HIST SCI 990 – RESEARCH AND THESIS**  
1-3 credits.

Independent research and writing of a thesis under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HIST SCI 999 – INDEPENDENT WORK**

1-3 credits.

Directed study under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## HORTICULTURE (HORT)

**HORT 120 – SURVEY OF HORTICULTURE**

3 credits.

For the beginning student. Scientific basis for horticultural practices; scope of the field of horticulture; introduction to propagation, culture, management, improvement, storage, and marketing of flowers, fruits, ornamentals and vegetables.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT 121 – HORTICULTURE COLLOQUIUM**

1 credit.

Overview of world, national, and regional horticulture plants and industries presented by various faculty. History and profiles of research advancing horticulture presented by department faculty.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT 227 – PROPAGATION OF HORTICULTURAL PLANTS**

3 credits.

Methods of propagation of herbaceous and woody plants, fundamental anatomical and physiological principles underlying sexual and asexual propagation of plants.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HORT 234 – ORNAMENTAL PLANTS**

3 credits.

On-site identification and description, aesthetic qualities and uses, environmental requirements and adaptability of selected ornamental plants with emphasis on annuals, herbaceous perennials, and those used for interior design.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT 240 – THE SCIENCE OF CANNABIS**

1 credit.

An overview of the history, legality, regulation, anatomy and botany, agronomic and horticultural practices, and end-use potential of industrial hemp. Focus on sustainable agricultural production and processing of industrial hemp for food, fiber, and cannabinoids. Gain real world insight into this rapidly expanding area. Hands-on experience growing, propagating and pollinating hemp.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HORT/PL PATH 261 – SUSTAINABLE TURFGRASS USE AND MANAGEMENT**

2 credits.

Sustainable use and management of turfgrass landscapes in urban and suburban environments, including home lawns, golf courses, and sports fields. Focus is on creating sustainable and attractive turfgrass landscapes through proper species selection, use of slow-release or organic fertilizer practices, and minimizing the use of pesticides and supplemental irrigation.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT/PL PATH 262 – TURFGRASS MANAGEMENT LABORATORY**

1 credit.

Hands-on turf establishment, cool- and warm-season grass, seed and weed identification, chemical application, and turf cultivation techniques and equipment use, plus field trips to major league sport facilities and golf courses.

**Requisites:** HORT/PL PATH/HORT 261 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT/LAND ARC 263 – LANDSCAPE PLANTS I**

3 credits.

Field identification, landscape characteristics, uses, environmental requirements, adaptability of woody ornamental plants; their autumn and winter character.

**Requisites:** Sophomore standing and (BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BOTANY 100)**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

**HORT 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Honors research work under direct guidance of a Horticulture faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**HORT 299 – INDEPENDENT STUDY**

1-3 credits.

Research work under direct guidance of a Horticulture faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HORT/HIST SCI 301 – (HORTI)CULTURAL ROOTS: HUMAN HISTORIES OF PLANTS AND SCIENCE**

4 credits.

Dig into the history of plant sciences to understand why plants and humans have the relationships they do today. Focus on the experiences of Indigenous Americans and People of Color to understand the roots of inequities in horticulture, agriculture, and other plant sciences. Practice skills as a translator of science and history through engagement with scientific publications, library resources, and archival materials. Define important societal questions, collect and analyze evidence, present original conclusions, and contribute to ongoing discussions about the relationship of people and plants. Includes intensive writing and oral presentations.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT/F&W ECOL/LAND ARC/PL PATH 309 – DISEASES OF TREES AND SHRUBS**

3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Includes field trips

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**HORT 320 – ENVIRONMENT OF HORTICULTURAL PLANTS**

3 credits.

Fluctuations and regulations of temperature, light, water, carbon dioxide and pollutants in natural and controlled environments. Effects upon plant growth and development. Adaptive mechanisms. Significance of air ions, electromagnetic fields and other geophysical factors.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, AGRONOMY 100, or HORT 120

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT/AGRONOMY/SOIL SCI 326 – PLANT NUTRITION MANAGEMENT**

3 credits.

Functions, requirements and uptake of essential plant nutrients; chemical and microbial processes affecting nutrient availability; diagnosis of plant and soil nutrient status; fertilizers and efficient fertilizer use in different tillage systems.

**Requisites:** (CHEM 103, 109, or 115 and ENVIR ST/GEOG/SOIL SCI/ ENVIR ST/GEOG 230) or SOIL SCI 301, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT 330 – WINES AND VINES OF THE WORLD**

2 credits.

An introduction to grape production and wine culture targeting students interested in learning the science of growing grapes, winemaking, and wine appreciation. Topics include cultural history and geography of the world's grape-producing regions, principles of plant anatomy and physiology, biochemistry of wine production, wine producing regions of the world and wine styles, and sensory evaluation of wines. Includes a wine tasting discussion to explore the sensory attributes of the wines and production practices specific to the wine production regions to be covered. Students must be 21 years old by the beginning of class.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT/SOIL SCI 332 – TURFGRASS NUTRIENT AND WATER MANAGEMENT**

3 credits.

Nutrient requirements of turfgrasses; nature of turfgrass response to fertilization; soil and tissue testing methodology and interpretation; irrigation scheduling; irrigation water quality; use of irrigation and fertilizer to minimize environmental impact; writing effective nutrient management plans.

**Requisites:** AGRONOMY/HORT/SOIL SCI/AGRONOMY/HORT 326 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**HORT 333 – SURVEY OF CONTROLLED ENVIRONMENT FOOD PRODUCTION**

2 credits.

Introduction and broad overview of indoor cultivation of food crops and hands-on experience in controlled environment food production including organic systems.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT 334 – GREENHOUSE CULTIVATION**

2 credits.

Principles of selection, production, handling, use of fruits, vegetables, flowers, and foliage plants grown indoors. One-day field trip required.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, AGRONOMY 100, or HORT 120

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT 335 – GREENHOUSE CULTIVATION LAB**

1 credit.

Provide students with hands-on experience in and understanding of greenhouse cultivation. The optional lab component of HORT 334 Greenhouse Cultivation.

**Requisites:** HORT 334 or concurrent registration

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT/AGRONOMY 338 – PLANT BREEDING AND BIOTECHNOLOGY**

3 credits.

Principles of transferring plant genes by sexual, somatic, and molecular methods and the application of gene transfer in plant breeding and genetic engineering to improve crop plants.

**Requisites:** (BIOLOGY/BOTANY/BIOLOGY 130, GENETICS 466, 467, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT/AGRONOMY/BOTANY 339 – PLANT BIOTECHNOLOGY: PRINCIPLES AND TECHNIQUES I**

4 credits.

Theoretical and practical training in plant biotechnology including molecular biology, protein biochemistry and basic bioinformatic techniques used in fundamental and applied research on plants. Valuable hands-on training to those interested in careers in biotechnology.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOLOGY/ZOOLOGY/BIOLOGY 102) and (CHEM 104, 109, or 116) or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**HORT/AGRONOMY/BOTANY 340 – PLANT CELL CULTURE AND GENETIC ENGINEERING**

3 credits.

Presents an overview of the techniques, biology and underlying theory of plant tissue culture, genetic engineering and genome editing. Overviews of research and commercial applications, and issues/challenges in the area of plant biotechnology are also covered.

**Requisites:** (BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 102, or BIOCORE 381) and (CHEM 104, 109, or 116), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT 345 – FRUIT CROP PRODUCTION**

3 credits.

Survey of fruit production, emphasizing commercial production of temperate fruits. Fruit origin, history, classification, physiology, genetics, harvest and post-harvest handling.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HORT 350 – PLANTS AND HUMAN WELLBEING**

2 credits.

Plants provide not only the foundation of food, clothing, and shelter essential for human existence, but also some of the key raw materials for transcendence and abstraction through music, art, and spirituality. Since antiquity, we have co-evolved with plants and their derivative products, with each exerting a domesticating force on the other. It is, for example, impossible to think of our modern life without its plant-based accompaniments in the form of cotton, sugar, bread, coffee, and wood. Yet they are so ubiquitous we may forget they all derive from plants discovered, domesticated, bred, and farmed for millennia in a never-ending pursuit to improve our wellbeing. Major points of intersection between plants and human wellbeing will be explored from a horticultural point of view by highlighting a plant or group of plants that represent a primary commodity or resource through which humans have pursued their own aims and explore effects and impacts on human society.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT 351 – A DEEPER LOOK AT PLANTS AND HUMAN WELLBEING**

1 credit.

Plants are essential for human wellbeing, yet they are often manipulated in ways that contribute significantly to human and environmental detriment. Provides an opportunity for students to consider the scientific, social, economic, and public policy implications of plants or groups of plants and dive deeply into those subjects for a variety of crops that are essential for human societies.

**Requisites:** Concurrent enrollment in HORT 350

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT/AGRONOMY/ENTOM/PL PATH/SOIL SCI 354 – DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF FIELD CROPS**

1 credit.

Provides students with information necessary to diagnosis and monitor corn, soybean, alfalfa and wheat for pests (insects, weeds, diseases) and nutrient deficiency symptoms including perspectives from Agronomy, Entomology, Horticulture, Plant Pathology and Soil Science. Proper soil and pest sampling information will be provided as will proper cropstaging techniques which are essential for pest and nutrient management.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HORT/AGRONOMY 360 – GENETICALLY MODIFIED CROPS: SCIENCE, REGULATION & CONTROVERSY**

2 credits.

Explores how and why genetically modified (GM) crops are created and their regulation at the federal and state level. Through case studies, students will learn about the impacts of GM crops and critically evaluate arguments both for and against their use. Readings and discussion introduce students to the complex economic, cultural, and political issues surrounding GM crops.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, GENETICS 466, or GENETICS 467

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT/A A E/AGRONOMY/PL PATH 367 – INTRODUCTION TO ORGANIC AGRICULTURE: PRODUCTION, MARKETS, AND POLICY**

3 credits.

Provides an in-depth understanding of the history of organic agriculture, its production, processing, marketing, and social dimensions, and its impact on environmental, community, and human health.

**Requisites:** AGROECOL/AGRONOMY/CE SOC/ENTOM/ENVIR ST/ AGROECOL/AGRONOMY/C&E SOC/ENTOM 103 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**HORT 370 – WORLD VEGETABLE CROPS**

3 credits.

An overview of the importance of fresh and processed vegetables worldwide. Vegetable origin, history, classification, culture, marketing, physiology, genetics, handling, quality, significance in world cultures and diets.

**Requisites:** BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT 372 – SEMINAR IN ORGANIC AGRICULTURE**

1 credit.

Faculty, regional professionals, local organic farmers, and students present and discuss topics relevant to history, marketing, economics, production, and social context of organic and sustainable agriculture.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HORT 375 – SPECIAL TOPICS**

1-4 credits.

Special topics on issues relevant to horticulture.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**HORT/AGRONOMY 376 – TROPICAL HORTICULTURAL SYSTEMS**

2 credits.

Highlights the connections between tropical plants and society. Topics include multidisciplinary reflections on the biology of tropical plants, as well as an overview of different production systems and some of the social and environmental problems associated with the utilization of tropical plants in the context of local and global markets. Provides the opportunity to demonstrate comparative skills with respect to local and international challenges posed by the topics we address in class. Illustrates connections between horticulture and conservation, food security, nutrition, and global health.

**Requisites:** Junior standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HORT 378 – TROPICAL HORTICULTURAL SYSTEMS INTERNATIONAL FIELD STUDY**

2 credits.

This international field study will meet during the winter intercession in a tropical country in Central America. Reflect on the role of plants in our daily lives and the effects that our daily choices have on the environment, human health, conflicts, poverty, and development. Provides an opportunity to develop a holistic appreciation of horticulture by highlighting the interactions between plants and society. Discuss some of the social, scientific and environmental challenges that conventional, sustainable and organic horticulture practices face in the production, marketing, and use of tropical crops. The field study will provide an opportunity to contextualize what was learned during "Tropical Horticultural Systems" (HORT/AGRONOMY 376). Visit diverse agricultural systems, such as small farms, large-scale operations, market growers, and industrial export businesses. In addition, we will visit agronomic centers, botanical gardens, herbaria, germplasm banks, and nature preserves.

**Requisites:** HORT/AGRONOMY 376

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**HORT 380 – INDIGENOUS FOODWAYS: FOOD AND SEED SOVEREIGNTY**

2 credits.

Indigenous foods of North America are a vital component of modern agricultural and food systems. Indigenous foods and foodways will be examined from interdisciplinary historical, legal, biological, and social perspectives. Historic indigenous foodways of the present-day upper Midwestern United States and the impact on food and seed sovereignty of settler colonialism and subsequent agricultural practices and policies will be explored. Current efforts to re-claim agricultural traditions and foodways to improve public health, economic opportunity, and food and seed sovereignty will be covered, including the right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, to define one's own food and agriculture systems, and to control the mechanisms and policies that govern food distribution. Hands-on activities are featured; previous examples include cooking with indigenous foods, ice fishing, and tapping maple trees for syrup.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HORT 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

Internship under guidance of a Horticulture faculty or instructional academic staff member and internship site supervisor. Students are responsible for arranging the work and credits with the Horticulture faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HORT 400 – STUDY ABROAD IN HORTICULTURE**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**HORT/AGRONOMY 501 – PRINCIPLES OF PLANT BREEDING**

3 credits.

Principles involved in breeding and maintaining economic crops; factors affecting the choice of breeding methods; alternative approaches through hybridization and selection.

**Requisites:** (GENETICS 466 or 467) and (BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381) or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT/AGRONOMY 502 – TECHNIQUES OF PLANT BREEDING**

1 credit.

Lab and field techniques used in breeding and maintaining economic crops.

**Requisites:** (GENETICS 466 or 467) and (BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381) or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**HORT/F&W ECOL/SOIL SCI 524 – URBAN SOIL AND ENVIRONMENT**

3 credits.

Many environmental issues related to urbanization are derived from the manipulation of soil. By coupling contemporary literature in urban soils with soil science, students will be able to evaluate environmental issues within the urban environment and provide new ways of remediating their impact.

**Requisites:** (PHYSICS 103, 201, 207, or 247) and (ENVIR ST/GEOG/ SOIL SCI/ENVIR ST/GEOG 230 or SOIL SCI 301 or concurrent), or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**HORT/GENETICS 550 – MOLECULAR APPROACHES FOR POTENTIAL CROP IMPROVEMENT**

3 credits.

Introduction of basic concepts of plant molecular biology and molecular techniques in current use. Topics include: organization and regulation of plant genes, gene cloning and analysis, transformation systems for plants, and molecular techniques for crop improvement.

**Requisites:** BIOCHEM 501 and (GENETICS 466 or 467); or graduate/ professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HORT/F&W ECOL/STAT 571 – STATISTICAL METHODS FOR BIOSCIENCE I**

4 credits.

Descriptive statistics, distributions, one- and two-sample normal inference, power, one-way ANOVA, simple linear regression, categorical data, non-parametric methods; underlying assumptions and diagnostic work.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**HORT/F&W ECOL/STAT 572 – STATISTICAL METHODS FOR BIOSCIENCE II**

4 credits.

Polynomial regression, multiple regression, two-way ANOVA with and without interaction, split-plot design, subsampling, analysis of covariance, elementary sampling, introduction to bioassay.

**Requisites:** FW ECOL/HORT/STAT/F&W ECOL/HORT 571**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**HORT/AGRONOMY/AN SCI/GENETICS 615 – GENETIC MAPPING**

3 credits.

Computing-intensive course to prepare students for genetic mapping research; linkage analysis and QTL mapping in designed crosses; linkage disequilibrium and association analysis (GWAS). Recommended preparation is undergraduate courses in genetics and statistics and prior experience writing R scripts (such as module 1 of STAT 327).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**HORT/BOTANY/SOIL SCI 626 – MINERAL NUTRITION OF PLANTS**

3 credits.

Essential and beneficial elements, solutions and soil as nutrient sources, rhizosphere chemistry, nutritional physiology, ion uptake and translocation, functions of elements, nutrient interactions, genetics of plant nutrition.

**Requisites:** BOTANY 500 or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**HORT 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study and research for students completing theses under direct guidance of a Horticulture faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**HORT 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual study and research for students completing theses under direct guidance of a Horticulture faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program. Continuation of HORT 681

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2016**HORT 699 – SPECIAL PROBLEMS**

1-4 credits.

Provides academic credit for directed study under direct guidance of a Horticulture faculty member or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HORT 799 – PRACTICUM IN HORTICULTURE TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HORT/AGRONOMY 811 – BIOMETRICAL PROCEDURES IN PLANT BREEDING**

3 credits.

Use of statistical methods to facilitate improvements in quantitative traits of cultivated plants.

**Requisites:** Graduate/professional standing and FW ECOL/HORT/STAT/ F&W ECOL/HORT 572**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**HORT/AGRONOMY 812 – SELECTION THEORY FOR QUANTITATIVE TRAITS IN PLANTS**

2 credits.

Discuss advanced topics in selection theory and the utilization of molecular markers in selection.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**HORT 875 – SPECIAL TOPICS**

1-4 credits.

Special topics on issues relevant to Horticulture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020

**HORT 910 – SEMINAR**

1 credit.

Weekly seminar topics in agronomy and horticulture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HORT/AGRONOMY/GENETICS 957 – SEMINAR-PLANT BREEDING**

1 credit.

Graduate seminar in Plant Breeding Plant Genetics (PBPG) that requires students to give oral scientific presentations on topics chosen by the instructors and/or the student's thesis research. This seminar is coordinated by PBPG faculty on a rotating basis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HORT 990 – RESEARCH**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## HUMAN DEVELOPMENT AND FAMILY STUDIES (HDFS)

**HDFS 174 – INTRODUCTION INTO CULTURAL DIVERSITY OF FAMILIES**

3 credits.

An introduction to racially and culturally diverse families with application to personal life. Focuses on structural factors impacting all families, such as demographic, economic, and historic trends, which illuminate the similarities and distinctions among and within racial and ethnic groups.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**HDFS 253 – HUMAN DEVELOPMENT & FAMILY STUDIES LEADERSHIP SYMPOSIUM**

1 credit.

Provides detailed examination of careers in Human Ecology and the fields of human development and family studies (HDFS). High level leaders working in a variety of professions related to the HDFS major will present as guest speakers (e.g., counseling, school psychology, family life education, early childhood education, child life, social work, health care, occupational therapy).

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**HDFS 262 – DEVELOPMENT OF THE YOUNG CHILD**

3 credits.

A basic foundation for understanding development from conception through middle childhood. Theoretical foundations, research findings, and practical applications.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HDFS 263 – DEVELOPMENT FROM ADOLESCENCE TO OLD AGE**

3 credits.

A basic foundation for understanding development from adolescence through old age. Theoretical foundations, research findings, and practical applications.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**HDFS 299 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2006**HDFS 425 – RESEARCH METHODS IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

3 credits.

Basics of research design used in studying family studies and individual development over the life course. Quantitative and qualitative research designs, participatory action research, and evaluation research, how research informs intervention and prevention programs.

**Requisites:** HDFS 262, ED PSYCH 320, PSYCH 460, or HDFS 263 (or PSYCH 560 prior to Fall 2017)**Repeatable for Credit:** No**Last Taught:** Spring 2023

**HDFS 462 – INFANT/TODDLER DEVELOPMENT & GROUP CARE**

3 credits.

Developmental milestones from conception up to 36 months of age. Exploration of child care, including access and quality of care, as major influences on the development of young children and families in the US. Observation of infant development in real-time and evaluation of child care program quality.

**Requisites:** HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**HDFS 464 – PLAY-DEVELOPMENT AND ROLE ACROSS THE LIFESPAN**

3 credits.

The role and function of play (and playfulness) in promoting development across the lifespan.

**Requisites:** HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HDFS/CNSR SCI 465 – FAMILIES & POVERTY**

3 credits.

This course introduces students to research at the intersection of family and poverty studies. We will learn how family behaviors vary by socioeconomic status; how romantic relationships, childbearing, and childrearing may be implicated in poverty; what the consequences of poverty are for family functioning and children; and about the role of policy in influencing families and poverty.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**HDFS 469 – FAMILY AND COMMUNITY INFLUENCES ON THE YOUNG CHILD**

3 credits.

Interaction of child in socialization settings, especially the family; socialization processes in the social system of child-family-community.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 471 – PARENT - CHILD RELATIONS**

3 credits.

Parents' interaction with their children, programs for parents, and parents' interactions with other institutions.

**Requisites:** HDFS 262, ED PSYCH 320, PSYCH 460, or HDFS 263 (or PSYCH 560 prior to Fall 2017)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**HDFS 474 – RACIAL ETHNIC FAMILIES IN THE U.S.**

3 credits.

Examines the diversity of family life and human development across and within racial ethnic groups in the United States as shaped by race, ethnicity, culture, biculturalism, and the social contexts of history, economics, immigration, and socio-political conditions.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 501 – SPECIAL TOPICS**

1-3 credits.

Specialized subject matter of current interest to undergraduate students.

Requisite varies by topic

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HDFS 516 – STRESS AND RESILIENCE IN FAMILIES ACROSS THE LIFESPAN**

3 credits.

Examines family stress and resilience across the life cycle from psychological, sociological, and biosocial perspectives. Explores research relating to normative and non-normative family stress and resiliency factors. Topics include parenting, poverty, violence, work-family balance, aging, health and wellness and others.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 517 – COUPLE RELATIONSHIPS**

3 credits.

Romantic relationships are universally desired, and individuals around the globe agree about what successful intimacy entails: we all want to be loved, supported, and cared for by partners we hold in high esteem. Nevertheless, intimate relationships can be difficult to form and maintain. This course covers a range of theoretical perspectives and methodologies to understand how it is that intimate relationships develop, thrive, or deteriorate over time. The course will also connect intimate relationship science to real life experiences.

**Requisites:** Sophomore standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 535 – A FAMILY PERSPECTIVE IN POLICYMAKING**

3 credits.

Students will explore the relationship between family functioning and public/private policies at the local, state and federal levels; analyze the consequences of issues, policies or programs on family well-being; and, examine roles for professionals in influencing policy development.

**Requisites:** Junior standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**HDFS 592 – RESEARCH EXPERIENCE IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

1-3 credits.

Research experience under the supervision of a faculty member in Human Development and Family Studies.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HDFS 601 – INTERNSHIP**

1-8 credits.

Enables students with supervised internships to earn academic credit while engaged in a professional experience in human development and family studies related fields. Course intended for juniors and seniors in Human Development and Family Studies.

**Requisites:** Consent of instructor

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HDFS/COM ARTS/JOURN 616 – MASS MEDIA AND YOUTH**

3 credits.

Children's and adolescents' use of mass media and mass media effects on them. Particular attention is given to changes in comprehension and other cognitive activities that give insights into media use and effects.

**Requisites:** JOURN 202, COM ARTS 325, HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, PSYCH 460, or LSC 251 (or PSYCH 560 prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**HDFS 650 – PARENT EDUCATION AND SUPPORT PROGRAMS**

3 credits.

The purposes, contexts, and implementation of parenting support and education programs are studied. Some sections may include a service learning component.

**Requisites:** HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 662 – ADVANCED STUDY OF THE YOUNG CHILD**

3 credits.

Research literature and current theories; topics of individual interest.

**Requisites:** HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HDFS 663 – DEVELOPMENTAL AND FAMILY ASSESSMENT**

3 credits.

Introduces students to the process of family-focused developmental assessment with infants and young children, including family interviewing, taking developmental histories, observing children, and developmental screening.

**Requisites:** HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, or PSYCH 460 (or PSYCH 560 prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 664 – PROSEMINAR: HUMAN DEVELOPMENT AND FAMILY STUDIES**

1-3 credits.

Survey and introduction to children and families. Required of all first year graduate students in Human Development and Family Studies. Credit varies by semester.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2013

**HDFS 680 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for seniors completing theses for Human Ecology honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HDFS 690 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**HDFS 699 – INDEPENDENT STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



### **HDFS/ED PSYCH 725 – THEORY AND ISSUES IN HUMAN DEVELOPMENT**

3 credits.

This course covers both classic and contemporary theories, providing students with a firm grounding in the theoretical perspectives that have shaped and are shaping understandings of human development across the life-span. The course explores the historical roots of contemporary perspectives and examines the development of theoretical conceptualizations both within and across theoretical perspectives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **HDFS/COUN PSY/ED PSYCH 726 – ETHNIC AND RACIAL DIVERSITY IN SOCIAL DEVELOPMENT**

3 credits.

Review of empirical and theoretical research on ethnic/racial diversity in social development across childhood, adolescence and early adulthood with emphasis on implications for counseling and school psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **HDFS 760 – INFANCY AND THE FAMILY**

3 credits.

Understanding of infants' socio-emotional, language, cognitive, perceptual and motor development within the context of the family and other social settings. Issues related to early developmental psychopathology and intervention will also be covered.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### **HDFS 761 – CHILDHOOD AND THE FAMILY**

3 credits.

Explores family socialization topics relevant to development issues in the early and middle childhood. Relevant contextual issues i.e. class, caste, culture and gender will be interfaced with traditional topics such as, sex stereotyping, racial identity, play, social competence, attachment, moral development and aggression.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **HDFS 763 – AGING AND THE FAMILY**

3 credits.

Psychological and social aspects of aging. Interaction of aged individual with the family and larger social systems. Developmental principles, methodological considerations, theoretical/empirical issues, and findings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2014

### **HDFS 765 – FAMILIES & POVERTY**

3 credits.

Introduce students to research on families and poverty. Students learn how family behaviors vary by socioeconomic status; how romantic relationships, childbearing, and childrearing may be implicated in poverty; what the consequences of poverty are for family functioning and children; and about the role of policy in influencing families and poverty.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **HDFS 766 – CURRENT TOPICS IN HUMAN DEVELOPMENT AND FAMILY STUDIES**

1-3 credits.

Specialized subject matter of current interest to graduate students. Literature, research, and current trends, with implications for teaching, parent education, and other professions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **HDFS 818 – ATTACHMENT THEORY AND RELATIONSHIPS ACROSS THE LIFESPAN**

3 credits.

Examines parent-child and intimate relationships using attachment theory and research (and critiques of this approach), focusing on relationships formed in infancy and across the lifespan.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**HDFS 843 – FAMILY POLICY: HOW IT AFFECTS FAMILIES & WHAT PROFESSIONALS CAN DO**

3 credits.

Covers how policies affect families and whether policies would be more effective if approached from a family perspective. Students will learn theories for conceptualizing family policy, how to conduct family impact analysis, and strategies for connecting research and policymaking.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**HDFS 865 – FAMILY THEORY I (SURVEY)**

3 credits.

An advanced course which surveys the current theories and models used in family research and theory development. Focus will be on structure-functional, interactional, developmental, systems, and exchange theory in relation to family research and application.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HDFS 869 – ADVANCED SEMINAR IN FAMILY STRESS AND COPING**

3 credits.

Emphasis on theoretical explanations of family stress from various levels of analysis--individual, social network, family, community, and larger social context. Considers sources of stress and how families experience, respond to, cope with, and resolve stress.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**HDFS 872 – BRIDGING THE GAP BETWEEN RESEARCH AND ACTION**

3 credits.

Addresses the critical skills and methods needed to gather and apply research-based knowledge and theory to human development and family studies. Strategies for conducting research relevant to social policy, programs, and the general public will be discussed as well as techniques for communicating research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HDFS/ED PSYCH/NURSING/SOC WORK 880 – PREVENTION SCIENCE**

3 credits.

This course provides a theoretical, empirical and practical foundation for prevention science as it relates to the prevention of human social problems. Research and evaluation methods, program design strategies, best practices and policy as they relate to the field of prevention are also examined. Intended for 2nd year graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**HDFS/ED PSYCH/NURSING/SOC WORK 881 – CAPSTONE SEMINAR IN PREVENTION SCIENCE**

1 credit.

This course provides an opportunity for students to meet with prevention professionals and scholars from across campus and the community to explore current and emerging issues of prevention research and professional practice. Students must complete HDFS/ED PSYCH/NURSING/SOC WORK 880 before taking this course.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**HDFS 990 – RESEARCH AND THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**HDFS 999 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# HUMAN ONCOLOGY (H ONCOL)

## H ONCOL/MED PHYS 410 – RADIOBIOLOGY

2-3 credits.

Effects of ionizing radiations of living cells and organisms, including physical, chemical, and physiological bases of radiation cytotoxicity, mutagenicity, and carcinogenesis; lecture and lab.

**Requisites:** Graduate/professional standing or (PHYSICS 202 or 208 and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or 153)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## H ONCOL/B M E/MED PHYS/PHYSICS 501 – RADIATION PHYSICS AND DOSIMETRY

3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry.

**Requisites:** (PHYSICS 323, 449 and MATH 320) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## H ONCOL 681 – SENIOR HONORS THESIS IN HUMAN ONCOLOGY 1

3-4 credits.

Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

## H ONCOL 682 – SENIOR HONORS THESIS IN HUMAN ONCOLOGY 2

3-4 credits.

Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## H ONCOL 691 – SENIOR THESIS IN HUMAN ONCOLOGY 1

3-4 credits.

Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

## H ONCOL 692 – SENIOR THESIS IN HUMAN ONCOLOGY 2

3-4 credits.

Independent research in the area of human oncology including biology, medical physics, or clinical oncology. A written thesis is required in the final semester.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## H ONCOL 699 – INDEPENDENT STUDY IN HUMAN CANCER BIOLOGY

1-3 credits.

Tutorial lab/library research and study. Opportunity for learning in depth without a thesis requirement.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## H ONCOL 750 – MULTI-DISCIPLINARY PATIENT-ORIENTED RESEARCH PRESENTATION SKILLS SEMINAR

1 credit.

Learn to value the contributions of oral presentations in developing your career, in convincing audiences of the results of your research, or gaining approval of your proposed research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## H ONCOL 910 – INDEPENDENT READING AND RESEARCH FOR FOURTH YEAR MEDICAL STUDENTS

2-8 credits.

Independent research under the direct supervision of Human Oncology faculty. Each student's research project is individualized to meet student research goals within context of faculty research needs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**H ONCOL 911 – TUMOR IMMUNOLOGY AND CANCER IMMUNOTHERAPY**

2 credits.

Gain a greater understanding of the basic and translational science that is fueling the ongoing immuno-oncology revolution in cancer care. Explore the tumor-immune microenvironment and modern approaches to cancer immunotherapy. Evaluate pertinent primary literature in this arena and exposure to the technological resources (e.g. flow cytometry, clinical pathology, cell therapeutics infrastructure) that are critical to implementing immunotherapies in the clinic. Tumor board attendance will highlight the clinical reasoning and toxicity management in the clinical use of immunotherapies for cancer treatment.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**H ONCOL 912 – CHALLENGES IN ONCOLOGY: APPLICATION OF MODERN BIOLOGY AND TECHNOLOGY TO CLINICAL CANCER CARE**

2 credits.

Radiation therapy has been used in treatment of cancer and other diseases for over 100 years. Gain a comprehensive overview of how modern technology allows us to precisely target the tumor while maintaining the function of normal tissues (i.e. the physics and biology underlying the use of radiation therapy). Develop a strong foundational knowledge of basic oncology principles, begin to understand the biology and physics underlying radiation oncology treatments, interpret dose/volume histograms and normal-tissue complication probabilities, understand the role of modern imaging in the workup, treatment, and follow-up of cancer patients, and be able to discuss the major financial issues associated with various treatment modalities. It is anticipated that students will incorporate these concepts, knowledge, experiences, and evidence in their future clinical practice.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**H ONCOL 922 – RADIATION ONCOLOGY**

2-4 credits.

Oncology-focused topics including staging, prognosis, and treatment approaches to different cancers. Different radiation modalities, treatment machines, and treatment planning. Opportunity to see patients in clinic and observe procedures (brachytherapy), under direct supervision by residents and attending physicians.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**H ONCOL 990 – RESEARCH IN HUMAN CANCER BIOLOGY**

1-12 credits.

Graduate thesis research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

# INDUSTRIAL AND SYSTEMS ENGINEERING (I SY E)

**I SY E 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career in industry.

**Requisites:** Sophomore standing**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**I SY E 191 – THE PRACTICE OF INDUSTRIAL ENGINEERING**

2 credits.

An introduction to industrial engineering subject matter areas, problem types, and design/analysis approaches, techniques, and methodologies. Special emphasis on formulation and design alternatives for problem solving.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**I SY E 210 – INTRODUCTION TO INDUSTRIAL STATISTICS**

3 credits.

Introduction to basic probability and statistical tools and methods from an industrial application perspective. Random variables and probability distributions; descriptive statistics; point estimates. Perform hypothesis testing, construct confidence intervals, and understand design of experiments in the context of motivating case studies. Regression and correlation analysis. Focus on applying statistical methods and tools to solve engineering problems. Use of Microsoft Excel to interpret and analyze data.

**Requisites:** (MATH 211, 217, 221, or 275) or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023

**I SY E 312 – DATA MANAGEMENT AND ANALYSIS FOR INDUSTRIAL ENGINEERS**

3 credits.

Fundamentals of data management and analysis. Formulating and solving real industrial engineering problems with appropriate data managing and modeling strategies. Fundamental industrial database management strategies, data preprocessing, visualization and modeling techniques; industrial database management and analysis techniques using leading programming software (MySQL and R).

**Requisites:** (I SY E 210, E C E 331, STAT/MATH/STAT 309, STAT 311, or 324) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 313 – ENGINEERING ECONOMIC ANALYSIS**

3 credits.

Financial accounting principles and cost systems, interpretation and use of accounting reports and supplemental information for engineering economic analyses, consideration of cost-volume-profit analyses, use of discounted cash flow techniques, flexible budgeting, transfer pricing, and capital budgeting.

**Requisites:** (MATH 217, 221, or 275 or concurrent registration), graduate/professional standing, or member of Engineering guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 315 – PRODUCTION PLANNING AND CONTROL**

3 credits.

Techniques and applications of control concepts in the design of inventory, production, quality, and project-planning systems; use of the computer as a component in such systems.

**Requisites:** (I SY E 210, E C E 331, STAT/MATH/STAT 309, STAT 311, 324, 371, MATH/STAT 431, 531, or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 320 – SIMULATION AND PROBABILISTIC MODELING**

3 credits.

Analysis of stochastic systems using both analytic methods and computer simulation. Empirical and theoretical models of arrival and service processes. State spaces and state transition probabilities. Simulation of queuing and manufacturing systems. Continuous time Markov analysis of manufacturing systems. Simulation project management, testing and emerging trends.

**Requisites:** (STAT/MATH/STAT 309, STAT 311, MATH/STAT 431, 531 or concurrent enrollment) and (I SY E 210, E C E 331, MATH/STAT/MATH 310, STAT 312, 324, 371, or concurrent enrollment) and (MATH 320, 340, or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 321 – SIMULATION MODELING LABORATORY**

1 credit.

Computer exercises involving generation and analysis of random variables, spreadsheet models of queuing systems, use of simulation software packages. Project.

**Requisites:** Concurrent enrollment in I SY E 320

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 323 – OPERATIONS RESEARCH-DETERMINISTIC MODELING**

3 credits.

Basic techniques for modeling and optimizing deterministic systems with emphasis on linear programming. Computer solution of optimization problems. Applications to production, logistics, and service systems.

**Requisites:** (MATH 222 or 276) and (MATH 340, 341 or 375), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 348 – INTRODUCTION TO HUMAN FACTORS ENGINEERING LABORATORY**

1 credit.

Hands on experience applying concepts discussed in I SY E/PSYCH 349. Complete a small three-part design project. Learn how to measure light, sound, anthropometric, and psychophysiological data, and then apply these measurements to product and workplace design challenges.

**Requisites:** Declared in Industrial Engineering and concurrent enrollment in I SY E/PSYCH 349, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/PSYCH 349 – INTRODUCTION TO HUMAN FACTORS**

3 credits.

Conveys the importance of considering human capabilities and limits in system design and operation. This includes understanding human characteristics from the cognitive, physical, and psychosocial perspectives. Implications of these characteristics are explored through understanding the needs of people, designing to support these needs, and evaluating systems to ensure they serve the intended purpose. Case studies are used to identify the human role in accidents and to identify design improvements. Application domains include consumer product design, human-computer interaction, workplace safety, and complex systems such as healthcare delivery.

**Requisites:** (I SY E 210, E C E 331, STAT/MATH/STAT 309, 431, STAT 311, 324, 371, MATH 531, PSYCH 210, or SOC/C&E SOC/SOC 360, or concurrent registration), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 350 – INDUSTRIAL ENGINEERING DESIGN I**

3 credits.

Introduction to the tools needed for advanced design courses through experiential learning and hands-on opportunities to conduct experiments, take relevant measurements, analyze real-world data, design systems, and to make and test prototypes of designs.

**Requisites:** Declared in Industrial Engineering, (COMP SCI 200, 220, 300, 301, 302, or placement into COMP SCI 300), (I SY E 210, STAT/MATH/STAT 309, 431, MATH 531, STAT 311 or 324) and I SY E 315

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 389 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Declared in Industrial Engineering Honors in Research

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2013

**I SY E 412 – FUNDAMENTALS OF INDUSTRIAL DATA ANALYTICS**

3 credits.

Provides an understanding of the fundamentals of using data analytics to make data-driven decisions. Emphasizes applying techniques to industrial engineering problems. Focuses on formulating and solving real industrial problems with the appropriate modeling strategies and analytics principles for better decision making.

**Requisites:** (I SY E 210, E C E 331, STAT 311, 324, STAT/MATH/STAT 309, 431, or MATH 531), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 415 – INTRODUCTION TO MANUFACTURING SYSTEMS, DESIGN AND ANALYSIS**

3 credits.

Introduction to the technologies, processes and systems of modern discrete part manufacturing. Emphasis on development of an understanding of the behavior of integrated systems.

**Requisites:** I SY E 315 or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 417 – HEALTH SYSTEMS ENGINEERING**

3 credits.

Introduction to the application of industrial engineering methods to the analysis and improvement of health care delivery. Exploration of common problems of decision making and control in health care. Examination of social, regulatory and economic factors unique to health care.

**Requisites:** I SY E 320 and 349, graduate/professional standing, or member of Engineering Guest Students, or declared in Clinical and Community Outcomes Capstone Certificate

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/COMP SCI/MATH 425 – INTRODUCTION TO COMBINATORIAL OPTIMIZATION**

3 credits.

Focuses on optimization problems over discrete structures, such as shortest paths, spanning trees, flows, matchings, and the traveling salesman problem. We will investigate structural properties of these problems, and we will study both exact methods for their solution, and approximation algorithms.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**I SY E 450 – INDUSTRIAL ENGINEERING DESIGN II**

3 credits.

Team-based project experience to address a real-world design challenge posed by an external organization. Collaboration with the project client to design a new system or process, or redesign an existing one, by integrating and applying appropriate Industrial and Systems Engineering knowledge, methodologies and tools for problem definition and analysis; idea generation; solution development, evaluation and justification; and implementation planning and impact assessment.

**Requisites:** Senior standing only, I SY E 313, 320, 323, 350, and I SY E/PSYCH/I SY E 349

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/CIV ENGR/N E 460 – UNCERTAINTY ANALYSIS FOR ENGINEERS**

3 credits.

Introduction to approaches for quantifying uncertainty in engineering analyses. Both analytical and computational methods are demonstrated.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**I SY E 468 – INTRODUCTION TO INDUSTRIAL ENGINEERING RESEARCH**

1 credit.

An introduction to the practice of conducting research in industrial engineering, literature reviews, identifying gaps in existing work, writing a research proposal.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**ISY E 476 – INDUSTRIAL ENGINEERING PROJECTS**

3 credits.

Complete design of an industrial engineering system in a real world setting, e.g., manufacturing, hospital, communications, food processing, distribution, transportation, etc.

**Requisites:** I SY E 320, 349, and INTEREGR 397 (formerly E P D 397)

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**ISY E 478 – RESEARCH AND BEYOND IN INDUSTRIAL ENGINEERING**

1 credit.

An introduction of skills required for successful research in graduate school. Preparing for graduate thesis writing, applying for graduate school, presenting research in a variety of ways. How to foster mental health and work-life balance.

**Requisites:** I SY E 468

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**ISY E 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Declared in Industrial Engineering Honors in Research

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2007

**ISY E/M E 510 – FACILITIES PLANNING**

3 credits.

Introduction to plant location theory and analysis of models of plant location; models for determining plant size and time phasing; line balancing models; techniques for investigating conveyor and other material handling problems; and models of plant layout.

**Requisites:** I SY E 315, (I SY E 323 or I SY E/COMP SCI/ E C E/ COMP SCI/I SY E 524) and I SY E/PSYCH 349, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E/M E 512 – INSPECTION, QUALITY CONTROL AND RELIABILITY**

3 credits.

Inspection data for quality control; sampling plans for acceptance inspection; charts for process control. Introduction to reliability models and acceptance testing.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ISY E 515 – ENGINEERING MANAGEMENT OF CONTINUOUS PROCESS IMPROVEMENT**

3 credits.

Addresses the role of the industrial engineer as a "manager" of continuous improvement in design and production processes. Provides modern tools and techniques for planning and managing team projects, integrating the concepts of total quality, data based decision making, and resource management.

**Requisites:** Senior standing and INTEREGR 397 (formerly E P D 397) or concurrent enrollment, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 516 – INTRODUCTION TO DECISION ANALYSIS**

3 credits.

Overview of modeling techniques and methods used in decision analysis, including multiattribute utility models, decision trees, and Bayesian models. Psychological components of decision making are discussed. Elicitation techniques for model building are emphasized. Practical applications through real world model building are described and conducted.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 517 – DECISION MAKING IN HEALTH CARE**

3 credits.

Introduction to the use of decision sciences in health-care. Conceptual understanding of medical decision making and its tools including decision trees, sensitivity analysis, Markov (decision) processes, and Monte Carlo simulations with examples from the current medical literature.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, or MATH/STAT/MATH 431) and (I SY E 323 or I SY E/COMP SCI/E C E/COMP SCI/I SY E 524), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**I SY E/COMP SCI/DS 518 – WEARABLE TECHNOLOGY**

3 credits.

Gives students hands-on experience in building wearable computing platforms. Designed for students who have a background in textiles and apparel design, computer science, engineering or media arts. By the completion of the course students will have fundamental knowledge of electronic circuitry, programming, and "maker skills".

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**I SY E 520 – QUALITY ASSURANCE SYSTEMS**

3 credits.

Introduces engineers to applications of total quality concepts and tools to develop, implement, and maintain an effective quality assurance system in a manufacturing or service organization. Emphasis is on documentation development, team-based improvement strategies, and international quality standards.

**Requisites:** Junior standing and I SY E 315, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**I SY E 521 – MACHINE LEARNING IN ACTION FOR INDUSTRIAL ENGINEERS**

3 credits.

Principles, algorithms, and industrial engineering applications of machine learning. Predictive analytics, with a focus on combining data and models to improve decision-making. Methods include: statistics, linear regression, logistic regression, regularization, over-fitting, clustering, classification and regression trees, boosting, bagging, deep learning, and neural networks. Applications areas include: healthcare, transportation, and the public sector.

**Requisites:** (COMP SCI 200, 220, or placement into COMP SCI 300), (I SY E 323 or COMP SCI/E C E/I SY E/COMP SCI/E C E 524), and (I SY E 210, STAT 311, 324, MATH/STAT/MATH 309, or 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**I SY E/COMP SCI/E C E 524 – INTRODUCTION TO OPTIMIZATION**

3 credits.

Introduction to mathematical optimization from a modeling and solution perspective. Formulation of applications as discrete and continuous optimization problems and equilibrium models. Survey and appropriate usage of basic algorithms, data and software tools, including modeling languages and subroutine libraries.

**Requisites:** (COMP SCI 200, 220, 300, 301, 302, 310, or placement into COMP SCI 300) and (MATH 320, 340, 341, or 375) or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/COMP SCI/MATH/STAT 525 – LINEAR OPTIMIZATION**

3 credits.

Introduces optimization problems whose constraints are expressed by linear inequalities. Develops geometric and algebraic insights into the structure of the problem, with an emphasis on formal proofs. Presents the theory behind the simplex method, the main algorithm used to solve linear optimization problems. Explores duality theory and theorems of the alternatives.

**Requisites:** MATH 320, 340, 341, 375, or 443 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/COMP SCI 526 – ADVANCED LINEAR PROGRAMMING**

3 credits.

Review of linear programming. Polynomial time methods for linear programming. Quadratic programs and linear complementarity problems and related solution techniques. Solution sets and their continuity properties. Error bounds for linear inequalities and programs. Parallel algorithms for linear and quadratic programs.

**Requisites:** COMP SCI/I SY E/MATH/STAT/COMP SCI/I SY E/MATH 525 and (COMP SCI 200, 220, 300, 301, 302, 310, or placement into COMP SCI 300) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ISY E/PSYCH 549 – HUMAN FACTORS ENGINEERING**

3 credits.

Analysis and design of man-machine systems using human performance models and data. Emphasis on systems involving communication and control. Projects using digital and analog computer simulation techniques for system design.

**Requisites:** I SY E/PSYCH 349, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 552 – HUMAN FACTORS ENGINEERING DESIGN AND EVALUATION**

3 credits.

Evaluation, analysis, and design recommendations for improving human performance and productivity in applied settings. Collection of instrument-based and user survey data. Emphasis on ergonomics, human factors and sociotechnical systems engineering approaches and problems. Design project required.

**Requisites:** I SY E/PSYCH 349 and INTEREGR 397 (formerly E P D 397) or concurrent enrollment or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**ISY E 555 – HUMAN PERFORMANCE AND ACCIDENT CAUSATION**

3 credits.

A systems view of accident causation, with emphasis on the human performance limitations important in industrial and other accidents. Models of causation, data collection systems, economic evaluation, and safety programs. Small group projects.

**Requisites:** I SY E/PSYCH 349, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 557 – HUMAN FACTORS ENGINEERING FOR HEALTHCARE SYSTEMS**

3 credits.

Introduction to the application of Human Factors Engineering theory and methods to the analysis and improvement of healthcare delivery systems.

**Requisites:** I SY E/PSYCH/I SY E 349, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ISY E/COMP SCI/M E 558 – INTRODUCTION TO COMPUTATIONAL GEOMETRY**

3 credits.

Introduction to fundamental geometric computations and algorithms, and their use for solving engineering and scientific problems. Computer representations of simple geometric objects and paradigms for algorithm design. Applications from areas of engineering analysis, design and manufacturing, biology, statistics, and other sciences.

**Requisites:** (COMP SCI 367 or 400) and MATH 234 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ISY E/MED PHYS 559 – PATIENT SAFETY AND ERROR REDUCTION IN HEALTHCARE**

2 credits.

Techniques for evaluating and reducing risks in medical procedures, including probabilistic risk assessment methods, failure mode and effects analysis, human factors analysis, and quality management. Discussions of patient safety standards, recommendations from agencies, and continual quality improvement.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ISY E 562 – HUMAN FACTORS OF DATA SCIENCE AND MACHINE LEARNING**

3 credits.

An examination of the "human side" of data science. Issues of bias, fairness, trust, and understandability. Unique characteristics of behavioral data, such as representative sampling, human adaptation, and grouped data. Practical skills in behavioral data analytics with a focus on important conceptual, design, and ethical issues specific to behavioral data.

Survey of machine learning techniques including supervised learning, unsupervised learning, reinforcement learning, deep learning, and text analysis. Methods are contextualized through engineering case studies.

**Requisites:** (I SY E 210, E C E 331, STAT/ MATH/STAT 310, STAT 312, or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/B M E 564 – OCCUPATIONAL ERGONOMICS AND BIOMECHANICS**

3 credits.

Introduces engineers how to design manufacturing and industrial operations in which people play a significant role, so that human capabilities are maximized, physical stress is minimized, and workload is optimized. Examples and topics emphasize industrial applications.

**Requisites:** I SY E/PSYCH/I SY E 349 or B M E 315, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**I SY E/E C E 570 – ETHICS OF DATA FOR ENGINEERS**

3 credits.

Introduction to ethical issues in data engineering and principled solutions. Algorithmic fairness (individual fairness, group fairness, counterfactual fairness), differential privacy and its applications, and robustness. Builds on prior experience with machine learning/data science programming.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**I SY E/N E 574 – METHODS FOR PROBABILISTIC RISK ANALYSIS OF NUCLEAR POWER PLANTS**

3 credits.

Methods for risk and reliability analysis of engineered systems, particularly as applied in the nuclear power industry. Fault trees and event trees, Bayesian data analysis, probabilistic risk management. Some familiarity with nuclear plant safety systems is helpful, but not required.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 575 – INTRODUCTION TO QUALITY ENGINEERING**

3 credits.

Introduction to statistically based quality improvement methods useful in industrial settings; observational methods and design of experiments; experimentation to discover influential factors and to analyze sources of variation; robust products.

**Requisites:** (I SY E 210, STAT/ MATH/STAT 310, STAT 312 or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**I SY E 601 – SPECIAL TOPICS IN INDUSTRIAL ENGINEERING**

1-3 credits.

In various areas. Sample topics: "Simulation" and "Systems Design".

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**I SY E 602 – SPECIAL TOPICS IN HUMAN FACTORS**

3 credits.

Various special topics in human factors engineering. Course topic may vary from semester to semester. Different versions of this course may be offered in same semester.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**I SY E 603 – SPECIAL TOPICS IN ENGINEERING ANALYTICS AND OPERATIONS RESEARCH**

1-3 credits.

Various special topics in engineering analytics and operations research, such as machine learning, data management and analysis, optimization, etc.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**I SY E 604 – SPECIAL TOPICS IN MANUFACTURING AND SUPPLY CHAIN MANAGEMENT**

1-3 credits.

Various special topics in manufacturing systems and supply chain management, such as digital manufacturing technologies, Internet of Things (IoT), supply chain, etc.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**I SY E 605 – COMPUTER INTEGRATED MANUFACTURING**

3 credits.

An introduction to computer-integrated design and manufacturing with a focus on manufacturing process planning. Emphasis on concurrent engineering principles, manufacturing process engineering, computer-aided process planning, NC programming, and CAM integration. Course provides experience with CAM software and NC machines.

**Requisites:** I SY E 315, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **I SY E 606 – SPECIAL TOPICS IN HEALTHCARE SYSTEMS ENGINEERING**

1-3 credits.

Various special topics in healthcare systems engineering, such as human factors in healthcare settings, operations research applied to healthcare, etc.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

### **I SY E/PHARMACY 608 – SAFETY AND QUALITY IN THE MEDICATION USE SYSTEM**

3 credits.

Addresses the problems of medication errors and quality in health care, problem resolutions, methods of assessment, and intervention implementation and quality management.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **I SY E 612 – INFORMATION SENSING AND ANALYSIS FOR MANUFACTURING PROCESSES**

3 credits.

Focuses on the sensing and multivariate data modeling and analysis techniques for monitoring, diagnosis, and quality improvement of manufacturing processes. The techniques introduced can find wide applications in health care, financial engineering, service industry applications, human factors, etc.

**Requisites:** I SY E/M E 512, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **I SY E 615 – PRODUCTION SYSTEMS CONTROL**

3 credits.

An intermediate to advanced course stressing the application of recent operations research techniques to production planning, scheduling and inventory control.

**Requisites:** I SY E 315, 320, and I SYE 323 and (MATH/STAT/MATH 310, STAT 312 or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **I SY E/B M I 617 – HEALTH INFORMATION SYSTEMS**

3 credits.

Provides grounding in core concepts of health information systems. Major applications include clinical information systems, language and standards, decision support, image technology and digital libraries. Evaluation of IE tools and perspectives designed to improve the quality, efficiency and effectiveness of health information.

**Requisites:** I SY E 417, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **I SY E 618 – QUALITY ENGINEERING AND QUALITY MANAGEMENT**

3 credits.

Strategic quality planning, change management, problem identification and solving, process improvement, and performance evaluation. Business and decision-making skills related to quality systems and process improvement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **I SY E 620 – SIMULATION MODELING AND ANALYSIS**

3 credits.

Introduction to simulation modeling and analysis techniques with application to production, logistics, service, and other systems. Emphasis on model building, application of basic statistical data analysis, and the use of simulation for design, evaluation, and improvement of such systems. Introduction to available software. Case studies.

**Requisites:** (COMP SCI 200, 220, 300, 301, 302, or placement into COMP SCI 300) and (STAT 224, 312, 324, or MATH/STAT/MATH 310), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **I SY E 624 – STOCHASTIC MODELING TECHNIQUES**

3 credits.

Techniques for modeling systems in which uncertainty is an essential factor. Emphasizes why, how and when techniques can or cannot be applied, rather than their mathematical derivation. Case studies and/or examples from such areas as logistics, production, and service industries.

**Requisites:** (STAT/MATH 309, 311, or MATH/STAT/MATH 431) and (MATH 320, 340, 341, or 375), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E 625 – LOGISTICS SYSTEMS DESIGN**

3 credits.

Practical methods for the planning, design and evaluation of complex logistics and distribution systems. Modeling techniques and solution approaches that reduce cumbersome details of logistics systems into models with a manageable number of parameters and decision variables. It shows how the solutions to these models are interpreted into optimal rules that guide the operation, design or planning process. Practical methods for the planning, design and evaluation of complex logistics and distribution systems. Modeling techniques and solution approaches that reduce cumbersome details of logistics systems into models with a manageable number of parameters and decision variables. It shows how the solutions to these models are interpreted into optimal rules that guide the operation, design or planning process. Builds on knowledge of introductory programming such as Python, Matlab, or R.

**Requisites:** (I SY E 323 or I SY E/COMP SCI/E C E/COMP SCI/ I SY E 524) and (I SY E 210, E C E 331, STAT/ MATH/STAT 310, STAT 312, 324, or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**I SY E/MATH/OTM/STAT 632 – INTRODUCTION TO STOCHASTIC PROCESSES**

3 credits.

Topics include discrete-time Markov chains, Poisson point processes, continuous-time Markov chains, and renewal processes. Applications to queueing, branching, and other models in science, engineering and business.

**Requisites:** (MATH/STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/COMP SCI 635 – TOOLS AND ENVIRONMENTS FOR OPTIMIZATION**

3 credits.

Formulation and modeling of applications from computer sciences, operations research, business, science and engineering involving optimization and equilibrium models. Survey and appropriate usage of software tools for solving such problems, including modeling language use, automatic differentiation, subroutine libraries and web-based optimization tools and environments.

**Requisites:** (MATH 320, 340, 341, or 375) and (COMP SCI 200, 300, 301, 302, placement into COMP SCI 300, or COMP SCI/L I S/COMP SCI 102 (COMP SCI 202 prior to Fall 2023)); grad/professional standing; declared in the Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**I SY E/M E 641 – DESIGN AND ANALYSIS OF MANUFACTURING SYSTEMS**

3 credits.

Covers a broad range of techniques and tools relevant to the design, analysis, development, implementation, operation and control of modern manufacturing systems. Case studies assignments using industry data will be used to elaborate the practical applications of the theoretical concepts.

**Requisites:** I SY E 315, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**I SY E/M E 643 – PERFORMANCE ANALYSIS OF MANUFACTURING SYSTEMS**

3 credits.

Examines the state of the art in the use of stochastic network theory to develop performance models of modern manufacturing systems.

**Requisites:** (I SY E 624 or I SY E/MATH/OTM/STAT/I SY E/MATH/OTM 632) and (COMP SCI 200, 220, 300, 301, 302, 400, or placement into COMP SCI 300), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021



**ISY E 645 – ENGINEERING MODELS FOR SUPPLY CHAINS**

3 credits.

Provides an overview of engineering fundamentals behind supply chains. Topics covered will include modeling and design of multi-stage production distribution systems, multi-echelon inventory models, theory of supply chain contracts, value of flexibility and information sharing in supply chains.

**Requisites:** I SY E 323 and I SY E 415, or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 649 – INTERACTIVE DATA ANALYTICS**

3 credits.

A cognitive engineering approach to human-computer interaction and data visualization in particular. Includes a four-part description of effective visualization: design intent, data and application domain, representation and interface features, and human limits and capabilities. The philosophical perspective, scientific basis, and practical tools for effective data visualization and visual analytics. Data processing and how to create static graphs as well as web-based interactive visualizations using the statistical language R.

**Requisites:** I SY E/PSYCH 349 and (I SY E 210, E C E 331, STAT/ MATH/ STAT 310, STAT 312, 324, or 340), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ISY E/PSYCH 653 – ORGANIZATION AND JOB DESIGN**

3 credits.

Design of productive organizations and people's roles within them. Issues including boundary location, organizational decision levels, autonomous work groups, implementation and diffusion. Roles of the union. Case studies.

**Requisites:** I SY E/PSYCH 349, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ISY E/B M E 662 – DESIGN AND HUMAN DISABILITY AND AGING**

3 credits.

Design of products for persons with physical, sensory or cognitive impairments is covered as well as the design of standard mass market products. Interdisciplinary teams explore specific disabilities, then design a standard mass market product in competition with each other.

**Requisites:** Junior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 699 – ADVANCED INDEPENDENT STUDY**

1-5 credits.

Under faculty supervision.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ISY E 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ISY E/POP HLTH 703 – QUALITY OF HEALTH CARE: EVALUATION AND ASSURANCE**

1-3 credits.

Implementation, oversight, and management of quality-oriented activities in health care settings. Overview of current and historical activities, approaches, and issues confronting health care related to quality assessment, assurance, and improvement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ISY E/C&E SOC/N E/SOC 708 – SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS**

3 credits.

Issues involved in decision-making regarding technological risks and risk management in areas such as nuclear power, hazardous waste disposal, and pollution control. Risk perception and cognitive biases; risk analysis and decision analysis; political issues in risk management; regulatory mechanisms; and risk communication. Selected case studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**I SY E/COMP SCI 719 – STOCHASTIC PROGRAMMING**

3 credits.

Stochastic programming is concerned with decision making in the presence of uncertainty, where the eventual outcome depends on a future random event. Topics include modeling uncertainty in optimization problems, risk measures, stochastic programming algorithms, approximation and sampling methods, and applications. Students are strongly encouraged to have knowledge of linear programming (e.g., MATH/COMP SCI/I SY E/STAT 525) and probability and statistics (e.g., MATH/STAT 431). Knowledge of integer optimization (MATH/COMP SCI/I SY E 728) is helpful, but not required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**I SY E/INFO SYS 722 – COMPUTER-BASED DATA MANAGEMENT**

3 credits.

Use, control and administration of centralized and distributed data bases. Topics include the definition, design, creation, revision, interrogation, update, security and integrity of data bases.

**Requisites:** Graduate/professional standing and INFO SYS 371**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**I SY E/COMP SCI 723 – DYNAMIC PROGRAMMING AND ASSOCIATED TOPICS**

3 credits.

General and special techniques of dynamic programming developed by means of examples. Shortest-path algorithms. Deterministic equipment replacement models. Resource allocation problem. Traveling-salesman problem. Knapsack problem. Analysis of inventory systems. General stochastic formulations. Markovian decision processes. Students are strongly encouraged to have knowledge of mathematical optimization (e.g., COMP SCI/I SY E/MATH/STAT 525, I SY E 623, COMP SCI/I SY E/MATH/STAT 726), knowledge of analysis (e.g., MATH/STAT 431 or 521) and programming ability (e.g., COMP SCI 200 or 301)

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**I SY E/COMP SCI/MATH/STAT 726 – NONLINEAR OPTIMIZATION I**

3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasi-Newton methods; conjugate-gradient and limited-memory methods for large-scale problems; derivative-free optimization; algorithms for least-squares problems and nonlinear equations; gradient projection algorithms for bound-constrained problems; and simple penalty methods for nonlinearly constrained optimization. Students are strongly encouraged to have knowledge of linear algebra and familiarity with basic mathematical analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**I SY E/COMP SCI 727 – CONVEX ANALYSIS**

3 credits.

Convex sets in finite-dimensional spaces: relative interiors, separation, set operations. Convex functions: conjugacy, subdifferentials and directional derivations, functional operations, Fenchel-Rockafellar duality. Applications to operations research and related areas. Students taking this course are strongly encouraged to have had a course in basic analysis (e.g. MATH 521) and a course in linear algebra (e.g., MATH 340).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**I SY E/COMP SCI/MATH 728 – INTEGER OPTIMIZATION**

3 credits.

Introduces optimization problems over integers, and surveys the theory behind the algorithms used in state-of-the-art methods for solving such problems. Special attention is given to the polyhedral formulations of these problems, and to their algebraic and geometric properties. Applicability of Integer Optimization is highlighted with applications in combinatorial optimization. Key topics include: formulations, relaxations, polyhedral theory, cutting planes, decomposition, enumeration. Students are strongly encouraged to have knowledge of Linear Programming (e.g., MATH/COMP SCI/I SY E/STAT 525), including algorithms, duality and polyhedral theory.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**ISY E/M H R 729 – BEHAVIORAL ANALYSIS OF MANAGEMENT DECISION MAKING**

3 credits.

Examination of behavioral science literature dealing with the processes by which individuals, small groups and organizations make decisions. Understanding decision-making behavior in order to improve managerial performance; modeling decision-making processes for systems design and theory building purposes. Knowledge of statistics strongly encouraged such as STAT 301.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E/COMP SCI/MATH 730 – NONLINEAR OPTIMIZATION II**

3 credits.

Theory and algorithms for nonlinearly constrained optimization. Relevant geometric concepts, including tangent and normal cones, theorems of the alternative, and separation results. Constraint qualifications. Geometric and algebraic expression of first-order optimality conditions. Second-order optimality conditions. Duality. Nonlinear programming algorithms: merit functions and filters; interior-point, augmented Lagrangian, and sequential quadratic programming algorithms.

**Requisites:** COMP SCI/I SY E/MATH/STAT/COMP SCI/I SY E/MATH 726

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 790 – MASTER'S RESEARCH AND THESIS**

1-9 credits.

Directed Master's-level research projects as arranged with instructor.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ISY E 823 – SPECIAL TOPICS IN OPERATIONS RESEARCH**

1-3 credits.

Subjects vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ISY E/PSYCH 854 – SPECIAL TOPICS IN ORGANIZATION DESIGN**

1-3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**ISY E/PSYCH 859 – SPECIAL TOPICS IN HUMAN FACTORS ENGINEERING**

1-3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ISY E/POP HLTH 875 – COST EFFECTIVENESS ANALYSIS IN HEALTH AND HEALTHCARE**

3 credits.

Basic ideas and tools of cost effectiveness analysis as applied in evaluating medical technologies. Addresses special problems and methods in assessing diagnostic technologies, including ROC analysis, and in measuring health for technology assessment. Uses "classical" and current journal literature.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and B M I/POP HLTH/B M I 552

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ISY E 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Directed PhD-level research projects as arranged with faculty advisor.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ISY E 961 – GRADUATE SEMINAR IN INDUSTRIAL ENGINEERING**

1-3 credits.

Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ISY E 990 – RESEARCH AND THESIS**

1-6 credits.

Directed PhD-level research projects as arranged with faculty advisor.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ISY E 999 – ADVANCED INDEPENDENT STUDY**

1-6 credits.

Under faculty supervision.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

## INFORMATION SYSTEMS (INFO SYS)

**INFO SYS 322 – INTRODUCTION TO DATABASES**

3 credits.

Introduction to database management systems with a focus on relational databases. Covers designing, creating, populating, managing, and retrieving data from databases. SQL will be used with a focus on querying for business applications and intelligence, data retrieval for summary reports, and data visualization. Offers a brief introduction to non-relational databases for business applications.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**INFO SYS 352 – DIGITAL STRATEGY**

3 credits.

Focus on the economic and technical concepts behind emerging information systems. Industry cases covering platforms, online markets, artificial intelligence, and business analytics. Caters to interests in technology consulting.

**Requisites:** None**Repeatable for Credit:** No**INFO SYS 365 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing or declared in undergraduate Business Exchange program**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INFO SYS 371 – TECHNOLOGY OF COMPUTER-BASED BUSINESS SYSTEMS**

3 credits.

Focus is on developing applications and business information systems on the web using a variety of programming languages and tools. Emphasis on deployment as well as design concepts.

**Requisites:** COMP SCI 301 or 220**Repeatable for Credit:** No**Last Taught:** Spring 2023**INFO SYS 424 – SYSTEMS ANALYSIS AND DESIGN**

3 credits.

Applied principles and techniques of information systems development including requirements identification and analysis, process and data modeling, team communication and collaboration, and system testing.

**Requisites:** INFO SYS 322 (422 prior to Fall 2023) and 371**Repeatable for Credit:** No**Last Taught:** Spring 2023**INFO SYS/ISY E 722 – COMPUTER-BASED DATA MANAGEMENT**

3 credits.

Use, control and administration of centralized and distributed data bases. Topics include the definition, design, creation, revision, interrogation, update, security and integrity of data bases.

**Requisites:** Graduate/professional standing and INFO SYS 371**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**INFO SYS 724 – ANALYSIS AND DESIGN OF COMPUTER-BASED SYSTEMS**

3 credits.

Analysis of business systems to identify possible need for new or improved computer-based systems and the design of systems to meet those needs.

**Requisites:** INFO SYS/ISY E 722**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**INFO SYS 765 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## INTEGRATED ARTS (INTEGRAT)

**INTEGRAT 110 – THE STUDIO SEMINAR: MAPPING YOUR CREATIVE PRACTICE**

1 credit.

Residents of The Studio: Creative Arts Community engage in an interdisciplinary hands-on approach to the creative arts and gain familiarity with the wide variety of arts disciplines on campus.

**Requisites:** Member of The Studio: Creative Arts Community**Repeatable for Credit:** No**Last Taught:** Fall 2022

**INTEGART 112 – THE STUDIO PRESENTS**

1 credit.

The residents of The Studio: Creative Arts Community engage in an interdisciplinary, hands-on experience of creative arts and professional practice, including developing and showing their original work in the local community.

**Requisites:** Member of The Studio: Creative Arts Community

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEGART 310 – INTERDISCIPLINARY ARTIST IN RESIDENCE STUDIO**

1-3 credits.

Guest artists will offer interdisciplinary studio courses on topics appropriate to their specializations. See [go.wisc.edu/artsresidency](http://go.wisc.edu/artsresidency) for information on specific residencies.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**INTEGART 312 – INTERDISCIPLINARY ARTIST IN RESIDENCE LECTURE**

1-3 credits.

Guest artists will offer interdisciplinary courses on topics appropriate to their specializations. see [go.wisc.edu/artsresidency](http://go.wisc.edu/artsresidency) for information on specific residencies. Requisites vary according to topic

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**INTEGART 330 – SPECIAL TOPICS IN INTEGRATED ARTS**

1-3 credits.

Specialized subject matter in the areas of interdisciplinary or integrated arts. Requisite varies according to topic.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**INTEGART 610 – INTERDISCIPLINARY ARTIST IN RESIDENCE STUDIO**

1-3 credits.

Guest artists will offer interdisciplinary studio courses on topics appropriate to their specializations. See [go.wisc.edu/artsresidency](http://go.wisc.edu/artsresidency) for information on specific residencies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**INTEGART 612 – INTERDISCIPLINARY ARTIST IN RESIDENCE LECTURE**

1-3 credits.

Guest artists will offer interdisciplinary lecture courses on topics appropriate to their specializations. See [go.wisc.edu/artsresidency](http://go.wisc.edu/artsresidency) for information on specific residencies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**INTEGART 630 – SPECIAL TOPICS IN INTEGRATED ARTS**

1-3 credits.

Specialized subject matter in the areas of interdisciplinary or integrated arts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2018

**INTEGART/M H R 632 – INTRODUCTION TO ARTS ENTREPRENEURSHIP**

3 credits.

An overview and foundation in preparation for developing, launching, or advancing innovative projects in arts, culture, design, and humanities.

Learn the unique contexts and challenges of creative careers. Develop creative project goals while gaining an understanding of the nature and structure of arts entrepreneurship in a variety of sectors - for-profit, nonprofit, government, and hybrid.

**Requisites:** Sophomore standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTEGART/M H R 636 – ENTREPRENEURSHIP IN ARTS & CULTURAL ORGANIZATIONS**

3 credits.

Become familiar with basic entrepreneurship principles and value proposition design techniques in social entrepreneurship settings with attention to the perspective of arts and cultural organizations. Content includes business model development, customer-driven innovation, lean startup practices, organizational capacity for entrepreneurial action, team performance, the structure of alliances and partnerships and funding mechanisms in the sector.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

# INTEGRATED LIBERAL STUDIES (ILS)

## ILS 110 – FIRST-YEAR TOPICS SEMINAR IN INTEGRATED LIBERAL STUDIES

3 credits.

A first-year seminar that explores how people make meaning across times, cultures, media, and disciplines.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

## ILS/ENVIR ST 126 – PRINCIPLES OF ENVIRONMENTAL SCIENCE

4 credits.

Relates principles of environmental science to our daily activities, with an eye to sustainability, conservation, and systems thinking. Introduces science as a process of inquiry and discovery rather than just a pre-established set of facts. Topics relate to energy, water, and land use, and include food, electric power, materials, buildings, transportation, and waste.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ILS 138 – CRC FIRST-YEAR SEMINAR: FOUNDATIONS OF A LIBERAL ARTS EDUCATION

1 credit.

Explores stereotypes of and updates conceptions of a "liberal arts education" and its value in today's world. Engages various events around campus and within Chadbourne Residence Hall, showcases the resources of the University, and builds community between students.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## ILS 139 – CRC SPECIAL SEMINAR: TOPICS IN THE LIBERAL ARTS

1-2 credits.

Explores a special topic in the liberal arts for students living in the Chadbourne Residential College. Emphasizes group interaction, interpretation, and critical thinking.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Fall 2022

## ILS 153 – WAYS OF KNOWING IN THE SCIENCES

4 credits.

Introduces science as a process of inquiry and discovery, not as a pre-established set of facts. Emphasizes hands-on learning in both laboratory and lecture environments with small group work and interactive discussion.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## ILS 198 – DIRECTED STUDY

1-3 credits.

Individual mentored study with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2009

## ILS 199 – DIRECTED STUDY

1-3 credits.

Individual mentored study with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

## ILS 200 – CRITICAL THINKING AND EXPRESSION

3 credits.

Explores the three modes of argument and expression: verbal, visual, numerical. Engages in critical thinking about how these modes are structured and used. Practice in, and interpretation of, the three modes.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## ILS 201 – WESTERN CULTURE: SCIENCE, TECHNOLOGY, PHILOSOPHY I

3 credits.

Western science and technology in the making. Major developments viewed in philosophical and social context, from antiquity to 17th century.

**Requisites:** Not open to students with credit for HIST SCI 201.

**Course Designation:** Breadth - Natural Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**ILS 202 – WESTERN CULTURE: SCIENCE, TECHNOLOGY, PHILOSOPHY II**

3 credits.

Western science and technology in the making. Major developments viewed in philosophical and social context from the 17th to early twentieth century.

**Requisites:** Not open to students with credit for HIST SCI 202 or 404

**Course Designation:** Breadth – Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS 203 – WESTERN CULTURE: LITERATURE AND THE ARTS I**

3 credits.

The development of literature and the arts in the ancient and medieval world, including Akhenaton's Egypt, Homer's Troy, Euripides' Athens, Virgil's Rome, and Dante's Florence. Literature and art in the context of society and ideas.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ILS 204 – WESTERN CULTURE: LITERATURE AND THE ARTS II**

3-4 credits.

The development of literature and the arts from the Renaissance to the modern period, including such figures as Shakespeare and Michelangelo through T.S. Eliot and Picasso. Literature and art in the context of society and ideas.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS 205 – WESTERN CULTURE: POLITICAL, ECONOMIC, AND SOCIAL THOUGHT I**

3 credits.

The development of Western political, economic and social thought, from its origins in classic Greece and the Judaeo-Christian tradition, through Rome and the Medieval period, to the Renaissance and Reformation.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ILS 206 – WESTERN CULTURE: POLITICAL, ECONOMIC, AND SOCIAL THOUGHT II**

3 credits.

The development of Western political, economic and social thought from the Reformation to the present day: the origins, logic and evolution of liberalism, Marxism, and organic conservatism as the principal systems of thought of the modern age.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS/RELIG ST 234 – GENRES OF WESTERN RELIGIOUS WRITING**

3 credits.

Explores literary forms through which religions originating in western culture convey ideas. Focuses on Jewish, Christian, Muslim and related religious texts.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ILS 251 – CONTEMPORARY PHYSICAL SCIENCES**

3 credits.

Explores modern physical theory and its application in science and technology. Topics include: relativity and the quantum theory; modern cosmology and astrophysics; the quantum basis of chemistry and molecular biology; nuclear physics and nuclear power technology; lasers. Addresses philosophical problems connected with these theories.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ILS 252 – CONTEMPORARY LIFE SCIENCES**

3 credits.

Employs a systems-oriented approach to the interrelation of plants and humans in their evolution and cultural development. Offers a historical geographic perspective concluding with a consideration of ecosystems in contemporary America.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ILS 253 – LITERATURE AND SOCIETY**

3 credits.

Representative episodes in the interaction of literature and society, organized either around a set of social institutions and their literary connections or around a set of literary forms and their social connections.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ILS 254 – LITERATURE AND SCIENCE**

3 credits.

Examination of the interactions between science, technology, and literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**ILS/ENVIR ST 255 – INTRODUCTION TO SUSTAINABILITY SCIENCE**

4 credits.

Explore the foundations of sustainability using the UW-Madison campus as a living laboratory. Ground your feet on the UW-Madison campus and ask questions about the energy we use, the food we eat, the air we breathe, the land we occupy, the goods we purchase, and the waste we create. A blend of environmental sciences and studies. Use principles of chemistry, physics, and biology to understand the dynamics of our human and earth systems, but also explore societal issues like public health and social justice, all through the context of sustainability and the UW-Madison campus community.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ILS 275 – SPECIAL TOPICS IN INTEGRATED LIBERAL STUDIES**

3 credits.

Interdisciplinary themes and issues from the Integrated Liberal Studies (ILS) program.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**ILS 298 – DIRECTED STUDY**

1-3 credits.

Individual mentored study with a faculty member, at the intermediate level.

**Requisites:** Consent of instructor

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ILS 299 – DIRECTED STUDY**

1-3 credits.

Individual mentored study with a faculty member, at the intermediate level.

**Requisites:** Consent of instructor

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS 338 – PEER MONTORING FOR FIRST-YEAR LIBERAL EDUCATION SEMINAR**

2 credits.

A mentoring and supervision class for Chadbourne Residence College (CRC) Peer Mentors who are assisting instructors of the CRC First-Year Seminar which focuses on conceptions and stereotypes of a "liberal arts" education and its value in today's world.

**Requisites:** Consent of instructor

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ILS/ITALIAN 350 – ROME: LUST FOR GLORY**

3-4 credits.

Examines the development of Rome, "the Eternal City," and its continuing presence as both a metaphoric and physical focal point of Italian artistic and cultural sensibilities. Outline the development of Rome's authoritative or "mythical" status in literature, art, architecture and film, beginning in the Augustan era and arriving to today, focusing on significant moments in the creation and expansion of the actual city and its cultural influence in the late-Middle Ages, the Renaissance, the era of the Risorgimento (Unification of Italy), and the rise of Fascism. Develop ability to think critically about how the diverse material productions of writers (historians, playwrights, poets), painters, sculptors, architects, philosophical thinkers, and later filmmakers of the periods covered reflect one another and reflect the ideas and ideologies of their age.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS/ITALIAN/LITTRANS/POLI SCI 365 – MACHIAVELLI AND HIS WORLD**

3 credits.

Introduces students to the major works of Machiavelli through the close reading of his writings in cultural and historical contexts. Discussion and targeted writing assignments will aim at cultivating in students 1) a broad understanding of Machiavelli's principal intellectual attitudes, 2) a deeper understanding of his literary sensibility, and 3) the ability to articulate controversies and complexities surrounding his thought.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ILS/LACIS 367 – MIGRATION AND THE MIGRANT EXPERIENCE IN THE AMERICAS**

3 credits.

Explores how the understanding of migration to the Americas has been shaped over time and across cultures. Engaging art and literature, and employing historical and psychoanalytic approaches, the course critically analyzes the migrant experiences. Topics include: the relationships between literature, art, and migration; the role of migrants in constructing America; and the role of art and literature in the empowerment of marginalized groups.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ILS 369 – MAGICAL REALISM AND POSTMODERNITY**

3 credits.

Examines the concept of magical realism and its cultural implications. Provides a critical framework for evaluating literature, art and movies and engaging in basic research, particularly when it comes to narrative analysis. Pays particular attention to the Latin-American boom, a time of big writers and big literature that presses the limits between fiction and reality, modernity and postmodernity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ILS 371 – INTERDISCIPLINARY STUDIES IN THE ARTS AND HUMANITIES**

3 credits.

Selected interdisciplinary topics in literature and art with emphasis on social, historical and political contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ILS 372 – INTERDISCIPLINARY STUDIES IN THE SOCIAL SCIENCES**

3 credits.

Interdisciplinary analysis of selected topics in the social sciences.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ILS 400 – CAPSTONE INTEGRATION SEMINAR**

3 credits.

Capstone experience seminar for Integrated Liberal Studies (ILS) students.

**Requisites:** Junior standing and declared in Certificate in Integrated Liberal Studies

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ILS/JEWISH/SOC 423 – MODERN JEWISH THOUGHT**

3 credits.

How do Jews fit into the modern world? While the "Jewish Question" initially referred to debates about Jewish emancipation (the struggle for equal citizenship and social integration that started with the French Revolution), it later served to describe modern Jewish political and social thought about the identity, place, and role of the Jews in the modern world. Beginning in the late 19th century, as cultural assimilation, economic impoverishment in eastern Europe, and rising antisemitism sowed doubts about the viability of emancipation and traditionalism alike, Jewish thinkers proposed new answers to the Jewish question. Learn about some of the major answers they debated, including revolutionary universalistic utopias (socialism and Communism), various forms of Jewish nationalism, hyphenated identities, cultural pluralism, and cosmopolitanism. Work to contextualize these ideas historically while also considering whether and how they remain relevant to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ILS 490 – RESEARCH IN INTEGRATED LIBERAL STUDIES**

2-3 credits.

Provides opportunities to pursue advanced research in integrated liberal studies.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**ILS 681 – UNDERGRADUATE HONORS THESIS**

3 credits.

Individual study for juniors or seniors completing theses for honors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**ILS 682 – UNDERGRADUATE HONORS THESIS**

3 credits.

Individual study for juniors or seniors completing theses for honors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**ILS 691 – UNDERGRADUATE THESIS**

3 credits.

Individual study for juniors or seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2008

**ILS 692 – UNDERGRADUATE THESIS**

3 credits.

Individual study for juniors or seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2009

## INTEGRATED SCIENCE (INTEGSCI)

**INTEGSCI 100 – EXPLORING BIOLOGY**

2 credits.

A first-year course focused on the core concepts in biology (evolution; transformation of energy and matter; information exchange and storage; structure and function; systems biology), professions in biology, and the foundational skills and knowledge needed for successful academic and post-graduate careers in biology.

**Requisites:** First year students or first year transfer students only

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTEGSCI 110 – BIOHOUSE SEMINAR: BIOLOGY FOR THE 21ST CENTURY**

1 credit.

Focused on developing skills in cooperative learning with peers and visiting scientists; integrating information across disciplines; communicating science; careers in biology; and, illustrating how biology can help solve society's pressing issues.

**Requisites:** Member of BioHouse Residential Learning Community

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTEGSCI 140 – EXPLORING SERVICE IN STEM**

1 credit.

A discussion-based seminar introducing first-year STEM students to the world of public service from the perspective of both the university and its community partners. Classroom activities and direct campus and off-campus experiences are included. Service opportunities include STEM outreach, sustainability, and public health. Involves approximately 1 hour per week of public service.

**Requisites:** First Year Students only

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTEGSCI 150 – EXPLORING RESEARCH IN STEM**

1 credit.

Offers an overview of the research process and opportunities to build skills in reading scientific literature. Understand different approaches to science and to be flexible in thinking about gathering evidence or solving problems. Supports articulation of research interests, identifying potential research mentors, and writing professional emails to secure research opportunities. Explore STEM careers and pathways that can come from engaging in research.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEGSCI 230 – EXPLORING DISCIPLINE-BASED LEADERSHIP & MENTORING**

2 credits.

Students will build practical peer leadership and mentoring skills, while evaluating and reflecting on personal experiences among a group of peers who challenge and learn from each other as they explore leadership. Class activities are designed to develop critical thinking around student development issues and provide strategies for integrating discussions of diversity, ethics, social justice, community, and civic responsibility into leadership experiences.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTEGSCI 240 – SERVICE WITH YOUTH IN STEM**

2 credits.

Teaches students about community engagement experiences, focusing on building community partnerships, understanding organizational missions and community needs, assessment of informal science outreach experiences, and issues related to scientific literacy and access to science.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTEGSCI 260 – ENTERING RESEARCH PART 1**

1 credit.

Seminar course for sophomore or transfer students to begin independent research in science, technology, engineering or mathematics. Taken concurrently with 1-3 research credits with faculty member. Supports independent research experience.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2021**INTEGSCI 261 – ENTERING RESEARCH PART 2**

1 credit.

Seminar course for sophomore or transfer students continuing independent research in science, technology, engineering or mathematics. Taken concurrently with 1-3 research credits with faculty member. Supports independent research experience.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Summer 2018**INTEGSCI 299 – INDEPENDENT STUDY**

1-3 credits.

Provides academic credit for research, library, and/or laboratory work under direct guidance of a faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTEGSCI 320 – INTERNSHIP**

1-3 credits.

Provides academic credit for skill development in authentic contexts in science education including service, peer mentoring, and leadership. See class notes for additional information.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTEGSCI 340 – SERVICE WITH YOUTH IN STEM II**

2 credits.

Applies communication skills and social awareness issues in ways that enable students to work with increasing levels of independence in building and maintaining community relationships compared to INTEGSCI 240. Includes a lab section applied to lecture experiences to prepare for work with children in elementary after-school science clubs and to focus on different styles of communication. The multi-disciplinary focus of the after-school lessons develops connections between students' field of study and others within STEM. In the service learning component, students apply academic knowledge through science education and outreach experiences in a community-focused and culturally sensitive way. Students work with underrepresented students in the Madison metropolitan area in elementary after-school science clubs, and are expected to critically reflect on the ties between their academic and community partnerships, and differences between campus and community culture.

**Requisites:** INTEGSCI 240**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTEGSCI 341 – SERVICE WITH YOUTH IN STEM PRACTICUM**

1 credit.

Apply communication, cultural competency, and leadership skills to work with community partners in a service learning practicum. Work with underrepresented students in the Madison metropolitan area in elementary after-school science clubs, and critically reflect on the ties between their academic and community partnerships, and differences between campus and community culture. Work with different community partners than they did in previous Service with Youth in STEM courses. This practicum combines the service experience with an in-class component to prepare to provide opportunities to critically reflect upon the ties between academic preparation and community partnerships, and on their experiences in varied community settings.

**Requisites:** INTEGSCI 340**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**INTEGSCI 375 – SPECIAL TOPICS IN INTEGRATED SCIENCE**

1-3 credits.

This course examines various special topics in science or science education. See class notes for additional information. Requisites vary by topic

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**INTEGSCI 605 – SCIENTIFIC TEACHING FOR TAS**

1 credit.

The goal of this course is to arm Teaching Assistants with survival skills in scientific teaching through theory, practice, and learning community. We will work together to learn the core themes of scientific teaching (active learning, assessment, and diversity) and apply them, in real time, to the courses in which the TAs are concurrently teaching. This course is open to graduate students only.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**INTEGSCI 640 – PUBLIC SERVICE IN STEM**

1 credit.

Discusses the fundamentals of public service and civic engagement in the STEM (science, technology, engineering, and math) disciplines grounded in evidence-based knowledge and research. Provides an overview of the core pathways of public service, the knowledge required to effectively initiate and cultivate community partnerships, and the skills necessary to reflect upon personal experiences with community engagement activities. Fosters understanding of the broader impacts in STEM fields and prepares students to begin specializing in a specific pathway and develop relationships with a community partner.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEGSCI 650 – COLLEGE SCIENCE TEACHING**

1 credit.

Covers the fundamentals of learning theory and practical strategies for teaching science courses, while also developing community around this shared experience. The cohort will work together to learn the core themes of scientific teaching (active learning, assessment, and diversity) in theory so that they can make informed decisions about their teaching in the future. This course is required for Teaching Fellows Program participants.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEGSCI 660 – RESEARCH MENTOR TRAINING PRACTICUM**

1 credit.

Practicum course for graduate, post-doctoral or senior undergraduate students to be taken concurrently while mentoring an undergraduate engaged in an independent research experience.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTEGSCI 675 – SPECIAL TOPICS**

1-3 credits.

This course examines various special topics in science or science education. See Class Notes for additional information.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**INTEGSCI 699 – INDEPENDENT STUDY**

1-3 credits.

Provides academic credit for advanced research, library, and/or laboratory work under direct guidance of a faculty member. Students are responsible for arranging the work and credits with the supervising faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTEGSCI 740 – COMMUNITY RELATIONSHIPS AND MATERIALS DEVELOPMENT IN STEM PUBLIC SERVICE**

1 credit.

Provides opportunities for practical application of public service knowledge. Discusses development of a workplan for long-term projects, provides strategies to initiate community partnerships, and fosters development of materials for use in a community-based practicum. Includes time to work intensively on acquiring pathway-specific knowledge and skills and opportunities to practice, problem-solve, and support cohort members within and across public service pathways.

**Requisites:** INTEGSCI 640

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**INTEGSCI 750 – INSTRUCTIONAL MATERIALS DESIGN FOR COLLEGE SCIENCE TEACHING**

1 credit.

Designed to provide a practical application of pedagogical knowledge through the development of instructional materials for use in a university science education context. The process will be based around cohorts of participants working together to identify learning objectives, and create evidence-based assessments and learning experiences to target those objectives. This course is required for Scientific Teaching Fellows Program participants.

**Requisites:** INTEGSCI 650

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022



**INTEGSCI 840 – MENTORED PRACTICUM IN STEM PUBLIC SERVICE**

1 credit.

Develops community-engagement in STEM (science, technology, engineering, and math) through a mentored public service experience. Provides opportunities to refine and implement skills necessary to work with a community partner to implement and evaluate a project that is mutually beneficial in process and product. Places emphasis on professional development within a selected pathway (direct service, community engaged teaching, policy and governance, or social entrepreneurship/corporate social responsibility). Includes time to meet within specialized pathways and as a full cohort throughout the implementation of the practicum experience.

**Requisites:** INTEGSCI 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTEGSCI 850 – MENTORED PRACTICUM IN COLLEGE SCIENCE TEACHING**

1 credit.

Continues the development of graduate student's skills in teaching and learning college science courses by providing a mentored, independent teaching experience. Participants will have the opportunity to see how theories of learning and teaching play out in real instructional settings by implementing instructional activities and then evaluating the outcomes of those activities on the basis of student artifacts. A particular emphasis will be placed on participants creating an inclusive learning environment for teaching diverse student populations. The course also provides participants with frameworks for teaching and managing their own courses, should they pursue academic positions after graduate school. This course is required for Scientific Teaching Fellows Program participants.

**Requisites:** INTEGSCI 750**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

## INTERDISCIPLINARY COURSES (C A L S) (INTER- AG)

**INTER-AG 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Full-time work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**INTER-AG 2 – INTERNATIONAL INTERNSHIP IN SCIENCES**

1 credit.

For students undertaking internships in international locations; focus on pre-internship preparation and post internship activities; internships prepare students for graduate school or careers in applied science.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**INTER-AG 140 – CALS QUICKSTART: FOUNDATIONS**

1 credit.

Gain exposure to the College of Agricultural and Life Sciences (CALS) and UW-Madison, including resources and opportunities available as well as the foundational skills necessary for a successful transition to campus. Modules focus on your personal, academic, and professional development. Reflect on your goals and engage with peers to develop a roadmap for your own Wisconsin Experience.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Summer 2022**INTER-AG 141 – QUICKSTART: CONNECT2CAMPUS**

1 credit.

Gain first-hand exposure to the variety academic, co-curricular and professional opportunities available to you in the College of Agricultural and Life Sciences (CALS) and broader UW-Madison campus. Through workshops and dialogue, consider how you will positively contribute to the campus community. Connect with fellow students, faculty, staff, alumni, and industry leaders, and translate these experiences into actionable plans to reach your academic and career goals.

**Requisites:** INTER-AG 140**Repeatable for Credit:** No**Last Taught:** Summer 2019**INTER-AG/INTER-LS 152 – WAYS OF KNOWING: MEDICINE AND SOCIETY**

1 credit.

Covers a variety of scholarly topics on subjects dealing with medicine and society by campus-wide faculty. Encourages exploration in the possibility of a research experience in your degree program.

**Requisites:** Sophomore standing**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**INTER-AG 155 – ISSUES IN AGRICULTURE, ENVIRONMENT, AND LIFE SCIENCES**

1 credit.

Explore important issues in the application of science that cut across all majors in the College of Agricultural and Life Sciences, and that are critical for society in coming decades. Develop academic skills and explore majors and careers.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**INTER-AG 165 – INTRODUCTION TO INTERNATIONAL ISSUES IN AGRICULTURAL & LIFE SCIENCES**

1 credit.

Introduction to major international issues in the application of science that will be critical in the next half-century, both nationally and globally. Identify and explore international interests in an academic major and a career.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2017**INTER-AG 175 – WISE SEMINAR**

1 credit.

Women in Science and Engineering (WISE) learning community seminar, with speakers drawn from all fields of math, science, and engineering on campus. Learn about research on campus and discuss the impact of research on daily life.

**Requisites:** Member of Women in Science Engineering (WISE) Residential Learning Community**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023**INTER-AG/INTER-LS 250 – UNDERGRADUATE RESEARCH EXPERIENCE**

1-3 credits.

Participation in research or creative endeavor led by faculty or instructional staff. May include participation in research discussion groups, critiques of readings, and preparation of written or oral reports.

**Requisites:** Member of Undergraduate Research Scholars Program**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTER-AG 288 – INTRODUCTORY CALS HONORS SEMINAR**

1 credit.

Learn the basics of being a researcher: the scientific community (papers, etiquette, grants), ethics, career options, using the scientific literature, and preparation of research proposals.

**Requisites:** Declared in a College of Agricultural and Life Sciences (CALS) Honors program**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTER-AG 321 – STUDY ABROAD PRE-DEPARTURE SEMINAR**

1 credit.

Explores topics and issues related to a specific theme and region or country of the world, ensuring a foundation of knowledge and understanding for the hands-on experiences as part of an instructor-led study abroad program.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTER-AG 340 – CAREER AND LEADERSHIP DEVELOPMENT FOR INTERNS**

1 credit.

Career development process including: the job search, resume and cover letter writing, networking, inclusive workplaces, and conflict resolution. Synthesize internship experience and peers' internship experiences within the larger context of personal and professional goals, strengths, and values.

**Requisites:** Consent of instructor**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**INTER-AG 375 – SPECIAL TOPICS**

1-4 credits.

Topics of current interest to undergraduates.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2019**INTER-AG 388 – CALS HONORS - FUNDAMENTALS OF RESEARCH SEMINAR**

1 credit.

Introduction and exploration of the fundamentals of research: scientific process, utilization of scientific literature, and preparation of research proposals. Provides an environment external to the student's research experience that will help them grow as researchers.

**Requisites:** INTER-AG 288**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTER-AG/NUTR SCI 421 – GLOBAL HEALTH FIELD EXPERIENCE**

1-4 credits.

Specialized educational experiences that address a broad range of global health topics through interdisciplinary approaches to health and include participation in applied public health activities or service learning projects with communities and partner organizations.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**INTER-AG 488 – HONORS RESEARCH SEMINAR**

1 credit.

Development and evaluation of undergraduate research proposals, discussion of best practices for gaining admission to graduate programs and identifying effective mentors, exploration of career opportunities for research in the public and private sectors, and interaction with seniors who have successfully completed the CALS Honors in Research program.

**Requisites:** INTER-AG 388**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTER-AG 681 – SENIOR HONORS THESIS**

2-4 credits.

First semester of individual study for undergraduate students in a CALS Honors program completing a thesis, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTER-AG 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in a CALS Honors program completing a thesis, as arranged with a faculty member. INTER-AG 681

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023

## INTERDISCIPLINARY COURSES (ENGINEERING) (INTEREGR)

**INTEREGR 102 – INTRODUCTION TO SOCIETY'S ENGINEERING GRAND CHALLENGES**

2 credits.

Description and discussion of how engineering disciplines address specific engineering grand challenges in society. Focus on societal and multicultural issues encountered in engineering, as well as economic, ethical and political constraints on engineering solutions. Development of students' professional skills.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2016**INTEREGR 110 – INTRODUCTION TO ENGINEERING**

1 credit.

For first-year students in the College of Engineering. Introduction to engineering disciplines and professional fields; engineering design process; grand challenges; sustainability, societal, multicultural and global issues encountered in engineering; economic and ethical constraints on engineering solutions; and employment and educational opportunities in engineering.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2018**INTEREGR 111 – INTRODUCTION TO THE ENGINEERING DESIGN PROCESS AND PROFESSION**

2 credits.

Introduction to the engineering design process and profession through applied problem-solving. Emphasis on the engineering design process in industry, teamwork and communication skills; the engineer's responsibilities to customers and society; and the role of engineers in improving the human condition.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2015**INTEREGR 150 – DIRECTED STUDIES IN ENGINEERING FOUNDATION COURSES**

0 credits.

Directed study through College of Engineering Supplementary Instruction program. Group discussion and problem-solving coaching to enhance understanding of physics and its applications to engineering.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTEREGR 160 – INTRODUCTION TO ENGINEERING DESIGN**

3 credits.

This course provides the incoming freshman with an overview of engineering based on a "hands-on" experience with a client-centered engineering design project, which includes: 1) a team-based design project, 2) a survey of engineering disciplines, and 3) an introduction to computer tools and lab techniques.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2016**INTEREGR 170 – DESIGN PRACTICUM**

3 credits.

Introduction to design via the invention, fabrication and testing of a device that solves a problem proposed by a real world client. Information retrieval techniques, specification writing, methods for enhancing creativity, analysis techniques, scheduling, selection methodologies, cost estimating, sustainability in design, shop safety, engineering ethics, opportunities for engineering students (ie, study abroad, internships, co-ops), major exploration, fabrication equipment and techniques, and oral and written communication.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023

**INTEREGR 301 – ENGINEERING AND BIOLOGY: TECHNOLOGICAL SYMBIOSIS**

1-4 credits.

Combining engineering with biology can result in fascinating new technologies. This course explores 3 topics at the very forefront of bio-engineering innovation as well as the social, political, and ethical issues that can affect realization.

**Requisites:** M E 306, E M A 303, BSE 249, E C E 230, CBE/B M E 320, M S & E 330, or CIV ENGR 320, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**INTEREGR 303 – APPLIED LEADERSHIP COMPETENCIES IN ENGINEERING**

3 credits.

Introduction to basic leadership theories and perspectives; application of said theories to real-life experiences (both engineering and otherwise) through reflections, course discussion, readings, and experiential education in their local communities. Social Change Model of Leadership Development and Servant Leadership theory, viewed through an Applied Critical Leadership Theory lens.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEREGR 397 – ENGINEERING COMMUNICATION**

3 credits.

Communication for engineering, science, and technology; theory and practice in planning, preparing, and critiquing reports, proposals, and workplace correspondence; persuasive argumentation, ethical decision-making strategies, multidisciplinary communication skills, research strategies, collaborative work; oral presentations.

**Requisites:** Satisfied Communications A requirement and junior or senior standing only

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTEREGR 413 – CURRENT ISSUES IN INTERNATIONAL ENGINEERING**

1 credit.

Provides a comparative examination and analysis of global trends and regional variations for engineering concepts, standards and practices. Using organizational case studies, the course will describe and analyze multi-national engineering operations and summarize best practices and caveats.

**Requisites:** Declared in International Engineering Certificate

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTEREGR 477 – TOOLS FOR PROTOTYPING AND MANUFACTURING**

1-3 credits.

Tools for prototyping and manufacturing physical objects along with some of the underlying theory for how the tools work. Tools include 3D printers, 3D scanners, thermoformers, CNC routers, welders, wood saws, mills, lathes, laser cutters, waterjets, machine tools, general electronics, microcontrollers and Virtual Reality.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**INTEREGR 601 – TOPICS IN INTERDISCIPLINARY ENGINEERING**

1-3 credits.

Interdisciplinary topics of special interest to undergrad and grad students in engineering.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTEREGR 941 – COLLABORATIVE CAPSTONE II**

3 credits.

Explore chosen opportunity area through prototyping, user testing, and iteration. Creation of final, high resolution design, with communication and launch plan for startup, product or service. Practice behaviors of design thinking - ethics, critique, and storytelling.

**Requisites:** INTER-HE 940

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## INTERDISCIPLINARY COURSES (L & S) (INTER-LS)

**INTER-LS 101 – FIRST-YEAR SEMINAR IN THE BIOLOGICAL SCIENCES**

3 credits.

Interdisciplinary topics in the biological sciences for first-year students.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**INTER-LS 102 – FIRST-YEAR SEMINAR IN THE HUMANITIES**

3 credits.

Interdisciplinary topics in the humanities for first-year students.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**INTER-LS 103 – FIRST-YEAR SEMINAR IN LITERATURE**

3 credits.

Interdisciplinary topics in literature for first-year students.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**INTER-LS 106 – FIRST-YEAR SEMINAR IN THE SOCIAL SCIENCES**

3 credits.

Interdisciplinary topics in the social sciences for first-year students.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**INTER-LS 107 – FIRST-YEAR SEMINAR IN THE SOCIAL SCIENCES AND NATURAL SCIENCES**

3 credits.

Interdisciplinary topics in the social and natural sciences for first-year students.

**Requisites:** None**Course Designation:** Breadth - Either Social Science or Natural Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**INTER-LS 110 – FIRST-YEAR SEMINAR IN THE HUMANITIES AND SOCIAL SCIENCES**

3 credits.

Interdisciplinary topics in the humanities and social sciences for first-year students.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**INTER-LS 121 – APPROACHES TO CRITICAL THINKING AND WRITING**

3 credits.

Focus on learning to argue and express one's ideas. Learn how to construct a thesis that convinces through evidence. The arts provide an inevitable jumping-off point for critical judgments.

**Requisites:** Member of Summer Collegiate Experience (SCEP)**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2019**INTER-LS 130 – CRC FIRST-YEAR SEMINAR: FOUNDATIONS OF A LIBERAL ARTS EDUCATION**

1 credit.

Explores multiple dimensions of a liberal arts education and its value in today's world. Introduces University resources and promotes community building inside the residence hall and across campus. Engage directly with faculty from diverse fields on campus and with others in the Chadbourne Residence Hall.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTER-LS 139 – BELONG, EXPLORE, BECOME: DISCOVERING YOUR UW PATHS**

1 credit.

Examine self, community, and the liberal arts education while progressing through a major exploration framework - critically engage with the concepts of belonging and transitions, and explore questions of identity, community, and connectedness; explore UW schools/colleges, departments, majors, opportunities and resources; make connections between coursework and lived experiences outside of class to strengthen strategic exploration. Using readings, discussions, in-class activities, and out-of-class assignments, proceed through a framework with the goal of developing knowledge, confidence, and tools to navigate the University's opportunities and resources.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTER-LS 145 – HOW TO SUCCEED IN COLLEGE**

1 credit.

Introduction to current research on learning and guides how to apply that knowledge in your academic experience and course work. Covers research and its practical application in the areas of study skills, time management, academic writing, motivation, and self-direction. Promotes strong foundational skills to succeed at a higher education institution.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**INTER-LS/INTER-AG 152 – WAYS OF KNOWING: MEDICINE AND SOCIETY**

1 credit.

Covers a variety of scholarly topics on subjects dealing with medicine and society by campus-wide faculty. Encourages exploration in the possibility of a research experience in your degree program.

**Requisites:** Sophomore standing

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**INTER-LS 157 – BRADLEY ROUNDTABLE SEMINAR**

1 credit.

Promotes a successful transition from high school to college life, encourages collaborative learning between students, faculty, and staff, and prepares students to become integrative scholars and active participants in the university community and beyond.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**INTER-LS 210 – L&S CAREER DEVELOPMENT: TAKING INITIATIVE**

1 credit.

Interdisciplinary course in career development that connects the liberal arts and sciences degree to academic and career preparation, practical job skills, goal-setting, critical thinking and reflection. Designed for second year students, but open to all students.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTER-LS 215 – COMMUNICATING ABOUT CAREERS**

3 credits.

Explores the meaning and value of a liberal arts and sciences education for careers in the global, technological, and multicultural workplace of the 21st century. Through a series of individual and collaborative research and communication assignments, learn to critically analyze the career and education implications of a diverse and digital workplace, and to critically reflect on strengths and values to prepare to connect college work with lifelong career success. Practice academic skills of analyzing scholarly articles, constructing written essays, presenting formal speeches, and crafting digital presentations, as well as career skills of building resumes, writing cover letters, using social networking tools, and interviewing.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTER-LS/INTER-AG 250 – UNDERGRADUATE RESEARCH EXPERIENCE**

1-3 credits.

Participation in research or creative endeavor led by faculty or instructional staff. May include participation in research discussion groups, critiques of readings, and preparation of written or oral reports.

**Requisites:** Member of Undergraduate Research Scholars Program

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTER-LS 257 – BRADLEY PEER MENTOR COURSE**

2 credits.

Provides training and support for Peer Mentors of the Bradley Learning Community. Helps improve leadership and facilitation skills for Peer Mentors, whose primary service obligations include co-facilitating a section of the Bradley Roundtable seminar and arranging programming for the Bradley Learning Community. Introduces new techniques for working with small groups. Special attention will be paid to the research on the developmental and academic needs of first-year college students. Encourages students to develop their professional skills. Serves as an opportunity for guided reflection, as part of the community-based learning model.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**INTER-LS 260 – INTERNSHIP IN THE LIBERAL ARTS AND SCIENCES**

1 credit.

Earn academic credit connected to your work experience with outside internships, regardless of your major. Using online tools, collaboratively analyze and discuss internships with respect to the goals of a liberal arts and sciences education.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**INTER-LS 300 – TOPICS IN TEACHING AND LEARNING IN THE LETTERS, ARTS, AND SCIENCES**

3 credits.

Reflect on principles of liberal education, and apply those principles to your own learning experiences.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020



**INTER-LS 301 – METHODS IN THE APPLIED SOCIAL SCIENCES**

3 credits.

Gain a broad understanding of the diverse areas of social science research from various disciplinary perspectives, through a series of lectures, readings, and essay assignments. Includes problem definition, evidence gathering, data analysis, and results presentation.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTER-LS 302 – PROBLEMS IN THE APPLIED SOCIAL SCIENCES**

3 credits.

Gain an in-depth understanding of one particular application area of social science research through a series of lectures, readings, and essay assignments. Includes problem definition, evidence gathering, data analysis, and results presentation.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 2 number of completions**INTER-LS 315 – PARADIGMS AND PROCESS IN ACADEMIC INQUIRY**

2 credits.

Designed specifically for the research fellow, provides a structure for thinking about research that avoids reducing research to a single mode of thought and practice, and is thus inclusive of the range of approaches to research reflected in INTER-LS/INTER-AG 250. Will address specific topics that relate to the day-to-day activities of doing research, and addresses issues of what does it mean to think like a researcher, to act like a researcher, to talk like a researcher?

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTER-LS 601 – APPLIED SOCIAL SCIENCES PROBLEM PROPOSAL**

3 credits.

Select a particular application area of social science research -- a contemporary issue or problem area related to one's own career or community experiences and goals-- through a series of readings, group discussions, research activities, and writing assignments. Design a research review project that will summarize and analyze the most promising social science research paths to a solution of this issue or problem. Key steps include: problem definition, literature review, and thesis development.

**Requisites:** INTER-LS 301 and 302**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTER-LS 602 – APPLIED SOCIAL SCIENCES PROBLEM ANALYSIS**

3 credits.

Build on previous work in a particular application area of social science research -- a contemporary issue or problem area related to one's own career or community experiences and goals -- through a series of readings, group discussions, research activities, and writing assignments. Complete a research review project that will summarize and analyze the most promising social science research paths to a solution of this issue or problem. Key steps include: organization of findings, equity/diversity analysis, and final narrative presentation.

**Requisites:** INTER-LS 601**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTER-LS 700 – PUBLIC HUMANITIES: THEORIES, METHODS, CASES**

3 credits.

Introduction to a range of methods, theories, and cases that represent the emerging field of the public humanities. Explore the range of opportunities that exist outside of academia. Focus on the limits, audiences, and outcomes of research in the humanities, including the possibility of translational research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020

## INTERDISCIPLINARY COURSES (SOHE) (INTER-HE)

### INTER-HE 201 – BELONGING, PURPOSE AND THE ECOLOGY OF HUMAN HAPPINESS: ECOYOU

3 credits.

This course explores the art and science of purposeful living by integrating academic knowledge with issues real and relevant to students' lives including: identity and belonging; happiness, purpose and meaning; self-awareness and self-presentation; romantic, peer and family relationships; material culture, consumer behavior and financial well-being; and connections to community, culture, and society. From the microbes that inhabit our guts to political revolutions sparked by a tweet, human lives are embedded in an ecology of complex, interdependent systems. Using the lens of Human Ecology, you will address "big questions" like: How am I connected to others and to larger systems? What brings happiness and works for the "greater good" in human lives? An overarching goal of the course is to help you understand yourself as embedded in the web of ever-evolving interconnected networks, an "EcoYou." Human Ecology is a systems approach to studying and understanding relationships between humans and their everyday environments; it is a civic and socially conscious orientation that is committed to understanding and improving the quality of human lives. Human Ecology is inherently interdisciplinary drawing on research, theories and methods from diverse fields such as sociology, psychology, anthropology, economics, public health, biology, and art and design.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### INTER-HE 202 – SOHE CAREER & LEADERSHIP DEVELOPMENT

1 credit.

Provides an introduction to leadership development, career development and career readiness competencies for students in the School of Human Ecology.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### INTER-HE 301 – SPECIAL TOPICS IN HUMAN ECOLOGY

1-3 credits.

Special Topics in Human Ecology for undergraduate students. Subject matter varies.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### INTER-HE/ELPA 770 – COMMUNITY, OPPORTUNITY, AND JUSTICE

3 credits.

Critical examination of school-community engagement and collaboration. Examines theory and practice of mutually beneficial collaboration in diverse education settings, including leadership issues in collaborative settings, and facilitators and inhibitors to effective collaboration.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### INTER-HE 792 – THEORIES AND PERSPECTIVES IN HUMAN ECOLOGY

1-2 credits.

Explore the multidisciplinary theories and perspectives that inform ecological thinking and the lens of the School of Human Ecology. Gain a clear understanding of the human ecological perspective, as it presents in SoHE; the benefits and challenges of applying this lens to research, policy, and outreach; and how your work fits within the larger human ecological perspective. Furthermore, develop skills and discover resources supporting cross-disciplinary communication and collaboration.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### INTER-HE 793 – RESEARCH METHODS

3 credits.

Basic techniques: questionnaires, interviews, behavioral observation, sampling, experimental designs and data analysis using computer. Students learn to write a research proposal with literature review.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### INTER-HE 801 – SPECIAL TOPICS IN HUMAN ECOLOGY

1-3 credits.

Special Topics in Human Ecology at the Master's and Doctoral levels. Subject matter varies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**INTER-HE 810 – SEMINAR FAMILY ECOLOGY**

3 credits.

This seminar is focused on professional development and practice skills grounded in a human ecology perspective, which is typically seen as the engaged application of arts and sciences to issues affecting life quality.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**INTER-HE 815 – PROFESSIONAL SKILLS FOR COMMUNITY LEADERS AND PRACTITIONERS**

1 credit.

Special topics related to applied work and professional skill development in Human Ecology. Subject matter varies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTER-HE 940 – COLLABORATIVE CAPSTONE I**

3 credits.

Begin the collaborative design thinking process by exploring current state, empathizing with users, and defining opportunity areas for design. Specifically - find and frame a challenge, break it down to get started, conduct ethnographic and inspiration research, synthesize research findings into themes, insights and opportunities, visualize opportunities with frameworks and concepts, and compile evidence for desirability, feasibility and viability. Practice behaviors of design thinking - ethics, critique, and storytelling.

**Requisites:** Declared in the MS Design + Innovation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTER-HE 980 – CAPSTONE SEMINAR**

1-3 credits.

Facilitates and supports Human Ecology's masters students' completion of their capstone projects. (1) Offers students feedback from peers and the instructor throughout the term on their projects. (2) Helps students to set goals and provides structure for timely and successful project completion. (3) Covers skills and knowledge to support students in the next stage of their careers, after graduate school.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

## INTERNATIONAL ACADEMIC PROGRAMS – STUDY ABROAD (STDYABRD)

**STDYABRD 100 – TOPICS IN BIOLOGICAL SCIENCE**

1-6 credits.

Biological science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 106 – TOPICS IN HUMANITIES**

1-6 credits.

Humanities course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 116 – TOPICS IN LITERATURE**

1-6 credits.

Literature course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 125 – TOPICS IN NATURAL SCIENCE**

1-6 credits.

Natural science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Breadth - Natural Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 130 – TOPICS IN PHYSICAL SCIENCE**

1-6 credits.

Physical science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 136 – TOPICS IN SOCIAL SCIENCE**

1-6 credits.

Social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 145 – TOPICS IN SOCIAL AND NATURAL SCIENCE**

1-6 credits.

Social/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Social Science or Natural Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 150 – TOPICS IN HUMANITIES AND NATURAL SCIENCE**

1-6 credits.

Humanities/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Natural Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 155 – TOPICS IN BIOLOGICAL AND SOCIAL SCIENCE**

1-6 credits.

Biological/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 161 – TOPICS IN HUMANITIES AND SOCIAL SCIENCE**

1-6 credits.

Humanities/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 170 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 176 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 190 – FIRST SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Current enrollment in a UW-Madison study abroad program and prior approval by IAP in consultation with a related foreign language department.

**Requisites:** None**Course Designation:** Frgn Lang – 1st semester language course

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 195 – SECOND SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Does not award retrocredit. Current enrollment in a UW-Madison study abroad program and prior approval by IAP in consultation with a related foreign language department. Enrollment in this course presumes students have completed a first-semester course in the language or placed directly into the course.

**Requisites:** None**Course Designation:** Frgn Lang – 2nd semester language course

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2013

**STDYABRD 290 – THIRD SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Does not award retrocredit. Current enrollment in a UW-Madison study abroad program and prior approval by IAP in consultation with a related foreign language department. Enrollment in this course presumes students have completed a second-semester course in the language or placed directly into the course.

**Requisites:** None**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 295 – FOURTH SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Does not award retrocredit. Current enrollment in a UW-Madison study abroad program and prior approval by IAP in consultation with a related foreign language department. Enrollment in this course presumes students have completed a third-semester course in the language or placed directly into the course.

**Requisites:** None**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2013**STDYABRD 300 – TOPICS IN BIOLOGICAL SCIENCE**

1-6 credits.

Biological science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2008**STDYABRD 306 – TOPICS IN HUMANITIES**

1-6 credits.

Humanities course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2008**STDYABRD 316 – TOPICS IN LITERATURE**

1-6 credits.

Literature course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 325 – TOPICS IN NATURAL SCIENCE**

1-6 credits.

Natural science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 330 – TOPICS IN PHYSICAL SCIENCE**

1-6 credits.

Physical science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 336 – TOPICS IN SOCIAL SCIENCE**

1-6 credits.

Social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 345 – TOPICS IN SOCIAL AND NATURAL SCIENCE**

1-6 credits.

Social/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth - Either Social Science or Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 350 – TOPICS IN HUMANITIES AND NATURAL SCIENCE**

1-6 credits.

Humanities/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Natural Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 355 – TOPICS IN BIOLOGICAL AND SOCIAL SCIENCE**

1-6 credits.

Biological/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 361 – TOPICS IN HUMANITIES AND SOCIAL SCIENCE**

1-6 credits.

Humanities/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 370 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 376 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 380 – TOPICS IN BIOLOGICAL SCIENCE**

1-6 credits.

Biological science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 381 – TOPICS IN HUMANITIES**

1-6 credits.

Humanities course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 382 – TOPICS IN LITERATURE**

1-6 credits.

Literature course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 383 – TOPICS IN NATURAL SCIENCE**

1-6 credits.

Natural science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions



**STDYABRD 384 – TOPICS IN PHYSICAL SCIENCE**

1-6 credits.

Physical science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 385 – TOPICS IN SOCIAL SCIENCE**

1-6 credits.

Social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 386 – TOPICS IN SOCIAL AND NATURAL SCIENCE**

1-6 credits.

Social/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Either Social Science or Natural Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 387 – TOPICS IN HUMANITIES AND NATURAL SCIENCE**

1-6 credits.

Humanities/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Enrollment in a UW-Madison resident study abroad program permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Natural Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 388 – TOPICS IN BIOLOGICAL AND SOCIAL SCIENCE**

1-6 credits.

Biological/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 389 – TOPICS IN HUMANITIES AND SOCIAL SCIENCE**

1-6 credits.

Humanities/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program and permission of the LS Honors Program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 390 – FIFTH SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Current enrollment in a UW-Madison study abroad program and prior approval by IAP in consultation with a related foreign language department

**Requisites:** None**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 393 – SIXTH SEMESTER FOREIGN LANGUAGE**

3-6 credits.

Foreign language course taken on a Madison resident study abroad program in a language not taught at UW-Madison. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 500 – TOPICS IN BIOLOGICAL SCIENCE**

1-6 credits.

Biological science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 506 – TOPICS IN HUMANITIES**

1-6 credits.

Humanities course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 516 – TOPICS IN LITERATURE**

1-6 credits.

Literature course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 525 – TOPICS IN NATURAL SCIENCE**

1-6 credits.

Natural science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 530 – TOPICS IN PHYSICAL SCIENCE**

1-6 credits.

Physical science course taken on UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 536 – TOPICS IN SOCIAL SCIENCE**

1-6 credits.

Social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 545 – TOPICS IN SOCIAL AND NATURAL SCIENCE**

1-6 credits.

Social/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Social Science or Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 550 – TOPICS IN HUMANITIES AND NATURAL SCIENCE**

1-6 credits.

Humanities/natural science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 555 – TOPICS IN BIOLOGICAL AND SOCIAL SCIENCE**

1-6 credits.

Biological/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Biological Science or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 561 – TOPICS IN HUMANITIES AND SOCIAL SCIENCE**

1-6 credits.

Humanities/social science course taken on a UW-Madison resident study abroad program for which there is no departmental equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions

**STDYABRD 570 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**STDYABRD 576 – INTERDIVISIONAL TOPICS**

1-6 credits.

Course taken on a UW-Madison resident study abroad program for which there is no departmental or breadth equivalent. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions

## INTERNATIONAL BUSINESS (INTL BUS)

**INTL BUS 200 – INTERNATIONAL BUSINESS**

3 credits.

Technology, privatization, deregulation and other government policies, and growth of a mass culture are among the factors that drive global business today. Introduction to the key concepts necessary to understand the functioning of global markets and the inherent issues managers face in planning and executing international business strategies for products, services and investments.

**Requisites:** (ECON 101, 102, or 111); or declared in undergraduate Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL BUS/FRENCH 313 – PROFESSIONAL COMMUNICATION AND CULTURE IN THE FRANCOPHONE WORLD**

3 credits.

Study and analysis of the culture and sociology of professional environments in the French and Francophone worlds, including government, international organizations, NGO's and business. Students develop communication skills through interactive teaching methods in multimedia labs.

**Requisites:** FRENCH 228 or 311**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTL BUS/FRENCH 314 – CONTEMPORARY ISSUES IN GOVERNMENT, ORGANIZATIONS, AND ENTERPRISE**

3 credits.

Cultural study of contemporary Francophone Africa, focusing on issues in government, organizations and enterprise. Exploration of cultural and professional relations between Francophone Africa and France, the European Union, and the United States.

**Requisites:** FRENCH 228, 311, or FRENCH/INTL BUS/FRENCH 313**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL BUS/GEN BUS 320 – INTERCULTURAL COMMUNICATION IN BUSINESS**

3 credits.

Develops awareness and knowledge of cultural influences on business. Focuses on various attitudes toward work, time, material possession, business, and the relationship of these attitudes to different social, religious, philosophical, and educational backgrounds of business people from cultures around the world.

**Requisites:** Sophomore standing or declared in the Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL BUS/SPANISH 329 – SPANISH FOR BUSINESS**

3 credits.

Spanish lexicon and linguistic style for management, banking, accounting, capital investment, personnel and office systems, production of goods and services, marketing, finance, and import/export; includes translation and interpretive activities.

**Requisites:** SPANISH 311**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTL BUS 365 – CONTEMPORARY TOPICS**

1-3 credits.

A course for the exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing or declared in undergraduate Business Exchange program**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**INTL BUS 399 – READING AND RESEARCH-INTERNATIONAL BUSINESS**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged both during regular sessions and the intersession periods.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2012

**INTL BUS/M H R 403 – GLOBAL ISSUES IN MANAGEMENT**

3 credits.

Focuses on the strategic management required in global business. Topics include environmental analysis, global strategy, and subsidiary control. The aim of the course is to develop special skills that are required to manage international firms.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS/MARKETNG 420 – GLOBAL MARKETING STRATEGY**

3 credits.

Structure of foreign trading; commercial facilities available to exporters and importers; application of economic analysis in marketing decisions; contemporary trends in international economy affecting foreign trade policies and practices.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS/REAL EST 430 – INTERNATIONAL REAL ESTATE**

3 credits.

Analysis of international real estate and related transaction issues, especially in foreign countries which are visited as part of the course; survey of land use patterns and regulations, ownership rights, types of leases, transfer procedures, mortgage system, tax matters, currency risks, and geographical diversification issues.

**Requisites:** A A E/ECON/REAL EST/URB R PL/A A E/ECON/REAL EST 306 or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**INTL BUS/FINANCE 445 – MULTINATIONAL BUSINESS FINANCE**

3 credits.

Application of financial theory to the operations of multinational firms; survey of the international financial environment; determinants of international portfolio and direct investment capital flows; management of foreign exchange position and hedging strategies; evaluation of foreign investment projects (multinational capital budgeting); international financial structure decisions; multinational credit institutions and capital markets; taxation of international business.

**Requisites:** ECON/FINANCE/ECON 300 and (MATH 213, 222, or 276), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS 450 – STUDY ABROAD IN INTERNATIONAL BUSINESS**

1 credit.

Engage in activities that aim to translate and integrate the study abroad experience. Build international business and global competencies while connecting with others engaged in an immersion experience. Enrollment limited to declared Certificate in International Business students during their study abroad semester.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**INTL BUS/A A E/ECON 462 – LATIN AMERICAN ECONOMIC DEVELOPMENT**

3 credits.

A historico-institutional analysis of development problems in the principal Latin American countries, with attention to differentiation of national growth patterns and alternative development strategies.

**Requisites:** A A E 215, ECON 101, or 111

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS/FINANCE 745 – MULTINATIONAL BUSINESS FINANCE**

2-3 credits.

Theory of business finance as applied to the operations of multinational firms; financial analysis and control of foreign investment decisions; working capital management; multinational credit institutions and capital markets; special accounting problems and trends in international monetary affairs.

**Requisites:** FINANCE 700

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTL BUS 766 – GLOBAL BUSINESS MANAGEMENT**

2 credits.

Focuses on the acquisition of knowledge and the development of skills over a broad range of issues related to global management. The overall goal is to improve global competence by discussing: why organizations "go global;" global business venture options; the impact of foreign business activities on host countries; how to conduct a "CAGE" analysis; how to identify and mitigate global risks; issues related to CSR and corruption for foreign business activity; the role of labor codes; ways to manage a global work force; the role of "global cadres;" and the roles and management of expatriates. Country/region knowledge explored will encompass Asia, Africa, South America, and Europe.

**Requisites:** Declared in Business: General Management, MBA

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**INTL BUS 767 – GLOBAL LEARNING EXPERIENCE**

2 credits.

Visit host countries to improve global competence by discussing and experiencing key issues for US organizations doing business in the host countries. A key component will be the integration, in a global context, of the knowledge and skills from the MBA coursework in marketing, finance, international business, operations, economics, accounting, strategy, and leadership. The techniques learned and practiced can be used in the future to competently research and understand global business issues for any part of the world.

**Requisites:** Declared in Business: General Management, MBA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL BUS 799 – READING AND RESEARCH-INTERNATIONAL BUSINESS**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2011

## INTERNATIONAL STUDIES (INTL ST)

**INTL ST 101 – INTRODUCTION TO INTERNATIONAL STUDIES**

3-4 credits.

Introduces the field of international studies, and performs an interdisciplinary examination of the cultural, political, economic, and social patterns that have defined the modern world.

**Requisites:** None

**Course Designation:** Breadth - Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL ST 110 – INTERNATIONAL LEARNING COMMUNITY GENERAL SEMINAR**

1 credit.

Promotes understanding of international and cross-cultural issues and encourages collaborative learning between students, faculty, and staff of the International Learning Community (ILC).

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**INTL ST 210 – INTERNATIONAL LEARNING COMMUNITY LANGUAGE SEMINAR**

1 credit.

Promotes understanding of international and cross-cultural issues and related vocabulary in the target language and encourages collaborative learning between students, faculty, and staff of the International Learning Community (ILC).

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**INTL ST/ANTHRO/FOLKLORE/LINGUIS 211 – GLOBAL LANGUAGE ISSUES**

3 credits.

Focuses on language and its culture, example topics include: extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTL ST 212 – WISCHOLARS: WISCONSIN INTERNATIONAL SCHOLARS PROGRAM SEMINAR**

1 credit.

Discussion of international events and topics designed specifically for Wisconsin International Scholars (WISc) Program participants, geared toward fostering leadership skills.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**INTL ST/HISTORY/LACIS 242 – MODERN LATIN AMERICA**

3-4 credits.

A broad overview of Latin American history in the modern period, since independence but with a primary focus on the twentieth century. Particular emphasis will be placed on the socioeconomic, cultural, and political structures and processes that shaped and continue to influence life in Latin America. Key issues such as colonialism, nationalism, democracy, and revolution will be examined critically in light of broad comparative themes in Latin American and world history. Among the topics to be explored in detail will be the Mexican and Cuban revolutions, populism and dictatorship, socialism and neoliberalism, and drugs and migration.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**INTL ST 266 – INTRODUCTION TO THE MIDDLE EAST**

3 credits.

An interdisciplinary introduction to the diverse cultures, geography, history, modern states, politics, societies, and economies of the Middle East. A special emphasis placed on Islam as a religion and Muslim peoples.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL ST/AFRICAN 302 – ARABIC LITERATURE AND CINEMA**

3 credits.

An introduction to the most significant topics of contemporary Arabic literature and cinema. Discuss the legacy of colonialism, repressive nature of post-independence regimes, discourses on nationalism, religion vs. secularization, gender relations, representation of cultural otherness, and the Arab Springs. Materials will be drawn from a variety of cultural forms including literature, film, music, and performance; and scholarship, exploring the social, cultural, political, and economic contexts in which texts and films are written and exhibited.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**INTL ST 310 – INTERNATIONAL LEARNING COMMUNITY SEMINAR**

1-3 credits.

Addresses various international, cross-cultural and language topics of interest to the residents of the International Learning Community.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**INTL ST/GEOG 311 – THE GLOBAL GAME: SOCCER, POLITICS, AND IDENTITY**

3 credits.

Soccer (or football) is played in almost every part of the world. Soccer will be used as a lens through which to think critically about a range of issues within our own societies and around the world. This includes examining the relationship between European imperialism and the globalization of soccer in the early 20th century; thinking about who gets to play (and who gets paid) across different contexts; and analyzing how soccer is both globally networked and intensely local in its passions and rivalries. Draws from a range of perspectives on soccer, from those who consider it to be an opium for the masses to those who see it as a vehicle for positive social change, in order to illuminate some of the big questions facing the world today.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**INTL ST/GEOG 315 – UNIVERSAL BASIC INCOME: THE POLITICS BEHIND A GLOBAL MOVEMENT**

3 credits.

Should all individuals in society receive a regular transfer of cash from the state without any strings attached? If that question had been posed fifteen years ago, it would likely have been dismissed as unrealistic, undesirable, or just plain crazy. In recent years, however, the idea of introducing a universal basic income [UBI] has gained a lot of traction around the world. Growing inequalities, financial crises, fears about jobs being automated, and the COVID-19 pandemic have all helped to put UBI on the political map. But where did the idea come from? How is it traveling to different parts of the world? And on what grounds do different advocates justify their claims? Address these questions and more by exploring the history, philosophy, and political economy of UBI from a range of perspectives. Ongoing UBI experiments from different parts of the world will also be examined.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**INTL ST 320 – CONTEMPORARY ISSUES IN INTERNATIONAL STUDIES**

1-4 credits.

Addresses various contemporary international, cross-cultural, and interdisciplinary issues.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



### **INTL ST 322 – WASHINGTON DC SEMESTER IN INTERNATIONAL AFFAIRS INTERNSHIP SEMINAR**

4 credits.

Addresses professional development through academic work performed concurrently with an internship. Must be enrolled in UW Wisconsin in Washington, DC Internship Program. Must be a participant in the Washington DC semester in international affairs program

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **INTL ST/POLI SCI 325 – SOCIAL MOVEMENTS AND REVOLUTIONS IN LATIN AMERICA**

3-4 credits.

An introduction to the major empirical and theoretical themes in the study of social movements and politics in Latin America. While it is impossible to cover every theoretical approach or Latin American case during the semester, the course should give students the tools to begin to think critically about where and why people engage in collective action. We will develop and hone these tools through thinking about Latin American cases, paying specific attention to revolutions, social movements, and riots. The course is designed in three parts. It begins by exposing students to the dominant theoretical paradigms in the study of contentious politics as well as some prominent critiques. The course then turns to empirical themes in Latin American revolutions, challenging students to use and question the theoretical tools to which they have already been exposed. The final part of the course looks to social movements in Latin America. Cases will focus on challenges to dictatorships, identity-based movements, and resistance to globalization.

**Requisites:** Sophomore standing and (POLI SCI 120, 140 or INTL ST 101) or (POLI SCI 103 or 106 taken prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **INTL ST/POLI SCI 327 – INDIAN POLITICS IN COMPARATIVE PERSPECTIVE**

3 credits.

This course explores the socio-economic and political outcomes across India. This course will employ the major theories of comparative politics that explain political outcomes such as regime type, economic development and conflict. This course explores why some countries are democracies, while others are dictatorships; why some countries are poor, while others are rich; and why some countries experience high levels of violence, while others are peaceful. The course considers how India comports with standard theories in comparative politics and how standard theories might be revised in light of the Indian case. The course maps variation on the sub-national and regional level. The course will ultimately consider reforms proposed by the Indian state to further democratic and economic development and to reduce conflict. Students will learn about India's politics in a structured manner, and will gain an appreciation of the power and limitations of the political science method.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **INTL ST/HISTORY 330 – GLOBAL HISTORY OF HUMANITARIANISM**

3-4 credits.

What motivates us to try to alleviate the suffering of people in distant parts of the world? Examines the origins of humanitarian ideas and institutions, and how various humanitarian campaigns have been shaped by geopolitical processes, including the abolition of the slave trade, the spread of missionary Christianity, European imperialism, the Cold War, neoliberalism and the emergence of new media forms. Questions include: who has benefited from various humanitarian aid campaigns throughout history? How have various humanitarian campaigns shaped, and been shaped by, patterns of global inequality? Why have some populations, and not others, been deemed worthy of the world's compassion? Explores the worlds, perspectives and visions of humanitarians through a range of primary sources, including diary entries, political propaganda, memoirs, journalistic reportage, photography and documentary film.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**INTL ST/HISTORY 332 – EAST ASIA & THE U.S. SINCE 1899**

3-4 credits.

From the Boxer Rebellion, to the dropping of the atomic bombs, to the nuclear stand-off with North Korea, American foreign relations with East Asia during the 20th century were as consequential as they were controversial. Survey the issues and questions that alternately made allies and enemies of these nations: How did the quest for markets influence American policy towards China? How did European imperialism shape Japan's rise? Why did communism seem to offer a more compelling economic and political arrangement to China and North Korea? While squarely rooted in East Asia this course will also explore the questions that united and divided Americans over their nation's foreign policy. Through examining these questions, develop answers and construct their own narrative of the relationship between the United States and East Asia.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL ST/ED POL 335 – GLOBALIZATION AND EDUCATION**

3 credits.

Discuss the ways education is inextricably linked to global political, economic, and social contexts. Reflect on both scholarly research and popular conceptions of market, society and schools in different geographic and cultural contexts. Approach globalization from a context-sensitive, place-based approach, rather than abstract, predictive method through interdisciplinary analysis. Explore the concept of globalization across disciplinary frameworks including anthropology, geography, and history. Provides critical analysis to understand the challenges facing education in a globalization era, to build stronger commitment to helping address those challenges, and a set of skills for researching and writing about them. Examine the following "problem-spaces": globalization and migration; globalization and race; global testing and assessment; marketization of education; global city development and higher education; youth culture and globalization.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL ST/HISTORY 366 – FROM FASCISM TO TODAY: SOCIAL MOVEMENTS AND POLITICS IN EUROPE**

3-4 credits.

Investigates how everyday people shaped European history and politics, from World War I through today. Takes a comparative and interdisciplinary approach to analyze a range of major social movements in Europe, thinking in detail about what constitutes a social movement in the first place, and what determines its effectiveness. Key topics include the rise and fall of Fascism; the fate of the Communist and Socialist Left in Europe; the role of youth movements as drivers of change; and the constraints imposed on political organizing by both democratic and authoritarian societies. Drawing on a range of texts, songs, and films, investigates how people power has shaped the European state, and vice-versa, from 1922 through today.

**Requisites:** Sophomore standing or 3 credits in HISTORY**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTL ST/A A E 373 – GLOBALIZATION, POVERTY AND DEVELOPMENT**

3 credits.

Addresses the process of globalization -- trade, international capital flows, labor migration and remittances, and aid -- from the perspective of developing economies and the development process.

**Requisites:** A A E 215, ECON 101, 102, or 111**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTL ST/A A E 374 – THE GROWTH AND DEVELOPMENT OF NATIONS IN THE GLOBAL ECONOMY**

3 credits.

This course explores the roles of markets, states, and civil institutions, using economic theory, computer simulations, and historical experience to better understand the forces that shape the wealth and well-being of nations and people around the world.

**Requisites:** A A E 215, ECON 101, 102, or 111**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

### INTL ST/HISTORY 375 – THE COLD WAR - FROM WORLD WAR II TO END OF SOVIET EMPIRE

3-4 credits.

The Cold War was the first event to impact virtually all of humanity and left a lasting legacy that still shapes the current world order. Exploration of its conduct on five continents entails both a diversity of sources (film, fiction, documents, and memoir) and a range of topics (geopolitics, ideology, internationalism, empire, revolution, counterinsurgency, and covert operations). Its half-century history was marked by nuclear-armed stalemate and ideological competition in Europe, cultural politics of repression and generational revolt in America, interplay of anti-colonial nationalism and counterinsurgency in Asia, Africa, and Latin America, and a succession of major wars worldwide in Korea, Vietnam, Angola, and Afghanistan. By adopting an international perspective that carries us beyond the narrow ambit of the Moscow-Washington rivalry, integrate diverse global forces and particular national histories for a fuller understanding of an ever-changing world system.

**Requisites:** Sophomore standing or 3 credits in HISTORY or INTL ST

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### INTL ST 401 – TOPICS IN GLOBAL SECURITY

3-4 credits.

Contemporary issues in international studies in global security.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### INTL ST 402 – TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY

3-4 credits.

Contemporary issues in international studies in politics and policy.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### INTL ST 403 – TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION

3-4 credits.

Contemporary issues in international studies in global culture.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### INTL ST/POLI SCI 423 – SOCIAL MOBILIZATION IN LATIN AMERICA

3 credits.

Introduction to the major empirical and theoretical themes in the study of mobilization in Latin America.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### INTL ST/POLI SCI 431 – CONTENTIOUS POLITICS

3-4 credits.

Social movements, revolutions, and riots continually shape and re-shape the world around us. The course will evaluate and apply dominant theoretical approaches to understanding contention through careful attention to empirical cases throughout the world.

**Requisites:** Sophomore standing and POLI SCI 140 or INTL ST 101 (or POLI SCI 103 taken prior to fall 2017) or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### INTL ST/POLI SCI 434 – THE POLITICS OF HUMAN RIGHTS

3-4 credits.

Examines the origins and development of human rights in international politics. The course discusses what human rights are, international human rights movements, the international search for justice after mass crimes, and international humanitarian intervention. Not open to students with credit for POLI SCI 317 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### INTL ST/POLI SCI 436 – POLITICAL INEQUALITY: MEASURES, CAUSES, EFFECTS AND REMEDIES

3 credits.

In this course, we will review what political inequality is, and examine how scholars have measured it, and studied its causes, effects and remedies. The course will focus on inequalities in political participation and representation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**INTL ST/POLI SCI 439 – THE COMPARATIVE STUDY OF GENOCIDE**

3-4 credits.

Examines the phenomenon of genocide in the modern world. The class covers the concept of genocide, theories of why genocide occurs, and particular cases in the 20th and 21st centuries. Not open to students with credit for POLI SCI 318 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2021**INTL ST 501 – STUDY ABROAD TOPICS IN GLOBAL SECURITY**

1-6 credits.

Equivalency for study abroad with topics on global security. Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**INTL ST 502 – STUDY ABROAD TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY**

1-6 credits.

Equivalency for study abroad with topics on global economy. Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**INTL ST 503 – STUDY ABROAD TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION**

1-6 credits.

Equivalency for study abroad with topics on global culture. Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**INTL ST 504 – STUDY ABROAD TOPICS IN GLOBAL ENVIRONMENT**

1-6 credits.

Equivalency for study abroad with topics on global commons. Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**INTL ST 520 – STUDY ABROAD TOPICS IN INTERNATIONAL STUDIES**

1-6 credits.

Equivalency for study abroad international internships. Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**INTL ST 523 – INTERNATIONAL INTERNSHIP**

1-3 credits.

Equivalency for study abroad with topics on international studies.

Enrollment in a UW-Madison Study Abroad program

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**INTL ST/GEN&WS 535 – WOMEN'S GLOBAL HEALTH AND HUMAN RIGHTS**

3 credits.

A human rights approach to global women's health to provide an overview of health issues within the context of a woman's life cycle. It will pay special attention to the socio-cultural and economic factors that play a role in determining women's access to quality basic health care.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL ST 601 – TOPICS IN GLOBAL SECURITY**

1-4 credits.

Treatment of topics in global security.

**Requisites:** Sophomore standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTL ST 602 – TOPICS IN POLITICS AND POLICY IN THE GLOBAL ECONOMY**

1-4 credits.

Treatment of topics in international political economy and policy studies.

**Requisites:** Sophomore standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**INTL ST 603 – TOPICS IN CULTURE IN THE AGE OF GLOBALIZATION**

1-4 credits.

Treatment of topics in culture in the age of globalization.

**Requisites:** Sophomore standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**INTL ST 620 – TOPICS IN INTERNATIONAL STUDIES**

1-4 credits.

Treatment of topics in international studies.

**Requisites:** Sophomore standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**INTL ST 622 – WASHINGTON DC SEM IN INTERNATIONAL AFFAIRS SEMINAR**

4 credits.

Explores current issues in international affairs and the ways in which different organizations, businesses, corporations, NGOs and IOS seek to address them. Must be enrolled in UW Wisconsin in Washington, DC Internship Program. Must be a participant in the Washington DC semester in international affairs program

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**INTL ST 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2017**INTL ST 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2018**INTL ST 691 – SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a senior thesis

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**INTL ST 692 – SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**INTL ST 699 – DIRECTED STUDY**

1-4 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**INTL ST 720 – GLOBAL STUDIES SEMINAR**

3 credits.

An interdisciplinary survey of the major approaches to the study of globalization. Become familiarized with key theories, issues, and debates, as well as methodological tools. Topics will include global economy, environment, health, culture, media, development, labor, governance, civil society, science, technology, and geography.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2014

## ITALIAN (FRENCH AND ITALIAN) (ITALIAN)

**ITALIAN 100 – ITALIAN LANGUAGE ABROAD I**

1-4 credits.

First semester Italian language course taken on a study abroad program for which there is no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**ITALIAN 101 – FIRST SEMESTER ITALIAN**

4 credits.

Oral practice and conversation, grammar, reading, vocabulary building, and study of Italian cultures.

**Requisites:** Not open to students with credit for ITALIAN 181

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 102 – SECOND SEMESTER ITALIAN**

4 credits.

Oral practice and conversation, grammar, reading, vocabulary building, and study of Italian cultures.

**Requisites:** ITALIAN 101 or 181

**Course Designation:** Frgn Lang – 2nd semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 103 – ITALIAN LANGUAGE ABROAD II**

1-4 credits.

Second semester Italian language course taken on a study abroad program for which there is no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ITALIAN 181 – FIRST SEMESTER ITALIAN HONORS**

4 credits.

Accelerated course for honors students; oral practice, grammar, reading, reading.

**Requisites:** Declared in an Honors program. Not open to students with credit for ITALIAN 101.

**Course Designation:** Frgn Lang – 1st semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ITALIAN 200 – ITALIAN LANGUAGE ABROAD III**

1-4 credits.

Third semester Italian language course taken on a study abroad program for which there is no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ITALIAN 201 – ACCELERATED FIRST YEAR ITALIAN**

4 credits.

Accelerated development of oral, reading and writing skills up to a level equivalent to that of the end of ITALIAN 102. No previous knowledge of Italian is required. Does not award retrocredit.

**Requisites:** Not open to students with credit for ITALIAN 102

**Course Designation:** Frgn Lang – 2nd semester language course  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ITALIAN 202 – FAST-TRACK INTERMEDIATE ITALIAN FOR SPEAKERS OF ROMANCE LANGUAGES**

4 credits.

Accelerated development of oral, reading and writing skills equivalent of two intermediate-level college semesters of Italian. Does not award retrocredit.

**Requisites:** ITALIAN 102 or ITALIAN 201

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ITALIAN 203 – THIRD SEMESTER ITALIAN**

4 credits.

Conversational practice, review of grammar, viewing and discussion of Italian films, and class reading of short stories.

**Requisites:** ITALIAN 102 or ITALIAN 201

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 204 – FOURTH SEMESTER ITALIAN**

4 credits.

Conversation and writing practice, review of grammar, and class reading of a modern Italian novel.

**Requisites:** ITALIAN 203

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 210 – ITALIAN STUDIES ABROAD IN THE HUMANITIES I**

1-4 credits.

Italian studies course taken on a study abroad program for which there is no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions



**ITALIAN 230 – MODERN ITALIAN CULTURE**

3 credits.

A survey of Italian history, literature, art, music, politics, and popular culture of the 20th-21st centuries.

**Requisites:** ITALIAN 202 or 204

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 298 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2005

**ITALIAN 299 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**ITALIAN 301 – ITALIAN FOR READING KNOWLEDGE**

3 credits.

Intensive grammar; readings from appropriate texts in the humanities, sciences and social sciences. For those with language proficiency who wish to acquire a reading knowledge of Italian.

**Requisites:** ITALIAN 202, 204, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**ITALIAN 310 – ITALIAN STUDIES ABROAD IN THE HUMANITIES II**

1-4 credits.

Italian studies course taken on a study abroad program for which there is no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ITALIAN 311 – ADVANCED ITALIAN LANGUAGE**

3 credits.

Development of accurate and nuanced capacity for expression in Italian and for understanding the spoken and written language. Also addresses Italian phonetics and phonology to develop accurate pronunciation.

**Requisites:** ITALIAN 202 or 204

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 312 – WRITING WORKSHOP**

3 credits.

Development of composition skills related to expository and other forms of writing, with focus on grammatical skills, conventions, rhetorical techniques for organizing information, presenting coherent arguments, and appropriateness of language to topic. Substantial work on the development of writing strategies for composing and editing.

**Requisites:** ITALIAN 202 or 204

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 321 – STUDIES IN ITALIAN LITERATURE AND CULTURE I**

3 credits.

Focuses on masterworks of Italian literature in Medieval and Renaissance Italy, and on the ways in which this period laid a foundation of today's Italian society and culture. Includes historical, social, and cultural contexts of the Medieval and Renaissance periods.

**Requisites:** ITALIAN 202 or 204

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 322 – STUDIES IN ITALIAN LITERATURE AND CULTURE II**

3 credits.

Focuses on a variety of genres and media (poetry, drama, novel, short story, cinema, television) and authors, with emphasis on the cultural and historical contexts from 1600 to the present.

**Requisites:** ITALIAN 202 or 204

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 340 – STRUCTURES OF ITALIAN**

3 credits.

Examination of Italian phonetics and phonology, morphology and word formation, and syntax, with attention to contrasts with English. Prepares for advanced courses in Italian linguistics.

**Requisites:** ITALIAN 202, 204, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN/ILS 350 – ROME: LUST FOR GLORY**

3-4 credits.

Examines the development of Rome, "the Eternal City," and its continuing presence as both a metaphoric and physical focal point of Italian artistic and cultural sensibilities. Outline the development of Rome's authoritative or "mythical" status in literature, art, architecture and film, beginning in the Augustan era and arriving to today, focusing on significant moments in the creation and expansion of the actual city and its cultural influence in the late-Middle Ages, the Renaissance, the era of the Risorgimento (Unification of Italy), and the rise of Fascism. Develop ability to think critically about how the diverse material productions of writers (historians, playwrights, poets), painters, sculptors, architects, philosophical thinkers, and later filmmakers of the periods covered reflect one another and reflect the ideas and ideologies of their age.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN/ILS/LITTRANS/POLI SCI 365 – MACHIAVELLI AND HIS WORLD**

3 credits.

Introduces students to the major works of Machiavelli through the close reading of his writings in cultural and historical contexts. Discussion and targeted writing assignments will aim at cultivating in students 1) a broad understanding of Machiavelli's principal intellectual attitudes, 2) a deeper understanding of his literary sensibility, and 3) the ability to articulate controversies and complexities surrounding his thought.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 420 – TOPICS IN ITALIAN: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison Study Abroad Program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**ITALIAN/FRENCH/PORTUG/SPANISH 429 – INTRODUCTION TO THE ROMANCE LANGUAGES**

3 credits.

Introduction to structural similarities and differences apparent in major Romance languages (French, Italian, Portuguese, Spanish) and to their historical developments, with reference to basic linguistic features of each language: phonology, morphology, syntax, and lexicon.

**Requisites:** SPANISH 226, FRENCH 228, ITALIAN 311, or PORTUG 226

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN/MEDIEVAL/RELIG ST 440 – POVERTY, ECOLOGY AND THE ARTS: ST. FRANCIS OF ASSISI**

3 credits.

Focuses on literature about Francis of Assisi, from medieval accounts to contemporary literature, and related artistic portrayals of St. Francis as a religious symbol and model for economic, political and environmental justice.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ITALIAN 450 – SPECIAL TOPICS IN ITALIAN LITERATURE**

3 credits.

Focus on different topics across the centuries and the disciplines.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### ITALIAN 452 – SPECIAL TOPICS IN ITALIAN STUDIES: CULTURE, FILM, LANGUAGE

3 credits.

Examination of an aspect of Italian studies: culture, film, language; topic varies.

**Requisites:** One of: (ITALIAN 230, 301, 310, 311, 312, 321, 322, 340, 350, or 365) or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### ITALIAN/COM ARTS 460 – ITALIAN FILM

3 credits.

General survey of Italian cinema and of the relationship between film and the other arts. Consideration of the Italian and European socio-political context and developments in film theory.

**Requisites:** ITALIAN 204, COM ARTS 350, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ITALIAN 601 – THE 19TH CENTURY

3 credits.

Major trends and writers of Italian Romanticism, scapigliatura and verism.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### ITALIAN 621 – THE 18TH CENTURY

3 credits.

Survey of eighteenth-century Italian literature from 1700-1750

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### ITALIAN 622 – THE 18TH CENTURY

3 credits.

Survey of eighteenth-century Italian literature from 1750-1800

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### ITALIAN 623 – ITALIAN THEATRE

3 credits.

Topics in Italian theatre

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### ITALIAN 631 – FEATURES IN ITALIAN LITERATURE

3 credits.

Survey of Italian literature from the Middle Ages to Baroque period. Topics vary. Taught in Italian.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### ITALIAN 632 – FEATURES IN ITALIAN LITERATURE

3 credits.

Survey of Italian literature from Mid-Modernity to the 21st century. Topics vary. Taught in Italian.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### ITALIAN 636 – THE ITALIAN NOVEL

3 credits.

History and trends of the Italian novel between tradition and innovation from early 20th Century to the Present.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ITALIAN 651 – THE RENAISSANCE**

3 credits.

Overview of Italian Renaissance literature of the 15th and 16th centuries, beginning with the development of Humanism.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ITALIAN/MEDIEVAL 659 – DANTE'S DIVINA COMMEDIA**

3 credits.

Lectures on Dante's life and times, reading Divine Comedy.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**ITALIAN/MEDIEVAL 671 – THE 13TH CENTURY**

3 credits.

Systematic study of the earliest literary texts in Italy; the rise of the love lyric among the Sicilian poets; representative narrative works. The development of the lyric from Guittoe d'Arezzo to the poets of the Dolce Stil Nuovo.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2009

**ITALIAN 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2010

**ITALIAN 691 – SENIOR THESIS**

2 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ITALIAN 692 – SENIOR THESIS**

2 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ITALIAN 698 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**ITALIAN 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**ITALIAN 730 – TOPICS IN ITALIAN LITERATURE AND CULTURE**

3 credits.

Examination of aspects of Italian literature and culture, including disciplines such as language and cinema. Topic varies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**ITALIAN 731 – FEATURES IN ITALIAN LITERATURE**

3 credits.

In-depth exploration of periods and concepts of Italian literature, from the Middle Ages to Baroque period. Topics vary. Taught in Italian.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ITALIAN 732 – FEATURES IN ITALIAN LITERATURE**

3 credits.

In-depth exploration of periods and concepts of Italian literature, from Mid-Modernity to the 21st century. Topics vary. Taught in Italian.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ITALIAN 741 – THE 17TH CENTURY AND ARCADIA**

3 credits.

Survey of seventeenth-century Italian literature

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ITALIAN 799 – INDEPENDENT STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ITALIAN/FRENCH 821 – ISSUES IN METHODS OF TEACHING FRENCH AND ITALIAN**

1-3 credits.

Intended for instructors of elementary- and intermediate-level collegiate instructors of Italian; key concepts of communicative, literacy-oriented language teaching and related techniques for classroom instruction of Italian.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ITALIAN 951 – SEMINAR-STUDIES IN ITALIAN LITERATURE**

3 credits.

Advanced seminar. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ITALIAN 952 – SEMINAR-STUDIES IN ITALIAN LITERATURE**

3 credits.

Advanced seminar. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ITALIAN 990 – INDIVIDUAL RESEARCH**

1-12 credits.

In connection with the doctoral dissertation.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JEWISH STUDIES (JEWISH)****JEWISH/GNS 105 – FIRST SEMESTER YIDDISH**

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**JEWISH/GNS 106 – SECOND SEMESTER YIDDISH**

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context.

**Requisites:** JEWISH/GNS/JEWISH 105

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**JEWISH/LEGAL ST/RELIG ST 203 – JEWISH LAW, BUSINESS, AND ETHICS**

3 credits.

Explores the development of Jewish law from antiquity to modernity, with a focus on legal questions related to business practices and ethics. Consider issues ranging from ethical practices in agriculture to how to run a modern multi billion-dollar kosher industry; from the ethics of Jews celebrating Thanksgiving to regulations governing the preparation, consumption, and sale of coffee.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**JEWISH/RELIG ST 211 – INTRODUCTION TO JUDAISM**

4 credits.

General introduction to Judaism covering the biblical, classical rabbinic, medieval, and modern periods.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**JEWISH/HISTORY 213 – JEWS AND AMERICAN POP. CULTURE**

3-4 credits.

Explores the interplay between Jews and U. S. popular culture, covering such subjects as early 20th century vaudeville, the "golden age" of Hollywood, rhythm and blues music, television, and stand-up comedy.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2017**JEWISH/HISTORY 219 – THE AMERICAN JEWISH EXPERIENCE: FROM SHTETL TO SUBURB**

4 credits.

Surveys American Jews from the eighteenth century until after WW II, examining political behavior (radicalism, liberalism, and nationalism), class formation, social mobility, culture, inter-ethnic group relations, religion, and problems in community building.

**Requisites:** Sophomore standing or 3 credits in HISTORY or JEWISH**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JEWISH/HISTORY 220 – INTRODUCTION TO MODERN JEWISH HISTORY**

4 credits.

The history of the Jews in selected parts of the world since the 17th century. Particular attention will be paid to the fact that this is the history of a minority group whose life unfolds in relationship to a larger society.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**JEWISH/CLASSICS/LITTRANS/RELIG ST 227 – INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)**

4 credits.

Introduction to the text, development, history, and social context of the Hebrew Bible/Old Testament. Covers the Torah (Pentateuch), Neviim (Former and Latter Prophets), and Ketuvim (Writings), and provides a brief introduction to early Jewish literature (Pseudepigrapha/Apocrypha). Discusses various methods of analysis and theories of composition. Addresses major theological claims made of the text by Jewish and Christian communities. Explores contextualized interpretations in the ancient and modern day.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JEWISH 230 – ELEMENTARY TOPICS IN JEWISH LITERATURE**

3-4 credits.

Elementary topics in Jewish literature.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**JEWISH 231 – ELEMENTARY TOPICS IN JEWISH HISTORY**

3-4 credits.

Elementary topics in Jewish history.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022



### **JEWISH 232 – ELEMENTARY TOPICS IN JEWISH PHILOSOPHY AND THE ARTS**

3-4 credits.

Elementary topics in Jewish philosophy and the arts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

### **JEWISH 233 – ELEMENTARY TOPICS IN JEWISH STUDIES: SOCIAL SCIENCES**

3-4 credits.

Elementary topics in Jewish Studies drawn from the social sciences.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

### **JEWISH 236 – BASCOM COURSE**

3 credits.

Develop skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions used in Jewish Studies.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **JEWISH/CLASSICS 241 – INTRODUCTION TO BIBLICAL ARCHAEOLOGY**

4 credits.

An overview of archaeology and its relationship to understanding the biblical world.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **JEWISH/GERMAN/LITTRANS 269 – YIDDISH LITERATURE AND CULTURE IN EUROPE**

3 credits.

Exploration of European Yiddish fiction, poetry, folklore, and cinema, with a focus on works of the 19th and 20th centuries.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **JEWISH/RELIG ST 278 – FOOD IN RABBINIC JUDAISM**

3-4 credits.

Rabbinic literature frames the fundamental attitudes for how Judaism relates to food. Examine the history of food in rabbinic Judaism. In addition, theories from the field of food studies will be applied to rabbinic texts.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **JEWISH/GERMAN/LITTRANS 279 – YIDDISH LITERATURE AND CULTURE IN AMERICA**

3 credits.

Exploration of American Yiddish poetry, fiction, theater, and cinema created by European Jews in the United States.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **JEWISH 299 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2008

### **JEWISH/HEBR-MOD 301 – INTRODUCTION TO HEBREW LITERATURE**

3 credits.

Selected works from different periods and genres. Taught in Hebrew.

**Requisites:** HEBR-MOD 202 or placement into JEWISH/HEBR-MOD/JEWISH 301

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frqn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JEWISH/HEBR-MOD 302 – INTRODUCTION TO HEBREW LITERATURE**

3 credits.

Selected works from different periods and genres. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 301 or placement into JEWISH/HEBR-MOD/JEWISH 302

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frqn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JEWISH/HISTORY 310 – THE HOLOCAUST**

3-4 credits.

References to the Holocaust abound in contemporary political debates and in our popular culture. But most people know very little about the history of the Holocaust, despite the mountains of superb historical scholarship that experts in the field have produced over decades of dedicated research. Utilize correspondence, diaries, or other firsthand accounts of Holocaust victims, together with study of the larger events around them, to reconstruct the experiences of ordinary families swept up in the Nazi genocide.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JEWISH/LITTRANS 318 – MODERN JEWISH LITERATURE**

3-4 credits.

Pre-modern Jewish society's breakdown, immigration, the challenges of integration and exclusion, and the establishment of new communities will serve as a backdrop for the analysis and comparison of Jewish literary texts written in Hebrew, Yiddish, German, Russian, and English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**JEWISH/RELIG ST 322 – THE SABBATH**

3 credits.

Takes up the question: What is the "Sabbath"? What does it mean "to rest"? Offers a broad, comparative introduction to the history of the Sabbath, from the Bible to the present day. Readings encompass a range of textual sources from the Jewish and Christian traditions. Topics include the major theological, ritual, and cultural practices that have developed around the Sabbath. Discuss contemporary political iterations of the Sabbath in modern, secular contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JEWISH/CLASSICS/RELIG ST 323 – THE BIBLE AND FILM: LITERATURE AND MEDIA**

3 credits.

An introduction to the study of the Bible as literature and of biblical reception in the medium of film, from early Hollywood to the present day. Explores the way in which the Bible (including both Hebrew and Greek Testaments), one of the foundational literary corpora of American society, has been interpreted, reinterpreted, and misinterpreted through the medium of film over the past century. We will begin each segment of the course by reading portions of the biblical text that have experienced significant interpretation, in order to understand the literary text that has been received in film. How beholden are filmmakers to the interpretations of communities that view these texts as authoritative, and where are they free to depart from their sources? Is it possible to "translate" biblical narratives into film without losing something in the translation? These questions will focus our study on ways the literature has been interpreted in this new medium.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B

Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**JEWISH/LITTRANS/RELIG ST 328 – CLASSICAL RABBINIC LITERATURE IN TRANSLATION**

3-4 credits.

Introduction to the literature of the Classical Rabbinic or Talmudic period of Judaism (2nd to 7th centuries CE). Historical and intellectual background; the interrelation of liturgy, legal and non-legal literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### **JEWISH/CLASSICS/HEBR-BIB/LITTRANS/RELIG ST 332 – PROPHETS OF THE BIBLE**

4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English).

**Requisites:** CLASSICS/JEWISH/LITTRANS/RELIG ST/CLASSICS/JEWISH/LITTRANS 227 or Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### **JEWISH/CLASSICS/RELIG ST 335 – KING DAVID IN HISTORY AND TRADITION**

3 credits.

An exploration of the literary and historical aspects of the text of 1-2 Samuel + 1 Kings 1-2; the history and archaeology of Jerusalem during the tenth century B.C.E.; and the varieties of ways in which the figure of King David has been received in subsequent religious and secular literature, visual art, music, television, and cinema.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **JEWISH/RELIG ST 340 – THE AMERICAN JEWISH LIFE OF DNA**

3 credits.

Explores the range of relationships between DNA and American Jewish life. It begins with the "prehistory" of the relationship between Jewishness and genetic science, from Biblical genealogies to early twentieth century racial science. It then turns to America in the second half of the twentieth century, when the discovery of the double helix and the atrocities of Auschwitz reinvigorated and reshaped American Jewish relationships to DNA.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **JEWISH/POLI SCI 341 – ISRAELI POLITICS AND SOCIETY**

3-4 credits.

Examines the issues currently facing Israeli society and the ongoing debates in Israeli politics. Provides historical background and analytical understanding of contemporary Israeli politics. Attention will be paid to political history, institutions, economic development, coalition formation, ethnic politics, and religious-secular divisions as they are manifested in Israeli politics.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **JEWISH/CLASSICS/RELIG ST 346 – JEWISH LITERATURE OF THE GRECO-ROMAN PERIOD**

3 credits.

Jewish literature from 350 BCE to 150 CE. The Greek and Hebrew sources include stories, religious poetry, wisdom books and apocalyptic texts.

Readings (in translation) from the Apocrypha, Pseudepigrapha, and the Dead Sea Scrolls in their historical, cultural and literary setting.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **JEWISH 350 – WHAT IS JEWISH STUDIES?**

3 credits.

Introduces Jewish studies as an interdisciplinary field and examines Jewish history, culture, and thought through the major questions that guide the field, including: What is Jewish practice? What is a Jewish text? What is diaspora? What is antisemitism? And, who are the Jews? Explores a variety of responses offered by scholars, writers, theologians, and artists. Develop the ability to think transhistorically, bringing together biblical, medieval, modern, and contemporary perspectives. Anchor inquiries into the field of Jewish studies through the completion of a substantial research project.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JEWISH 356 – JERUSALEM, HOLY CITY OF CONFLICT AND DESIRE**

3 credits.

Jerusalem, the Holy City for Judaism, Christianity, and Islam, has become the center of religious, political, and national contention. Explores the sources of the conflict and its development over the centuries, with the aim of illuminating the complex situation of the region and its implications for the world.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**JEWISH/LITTRANS 367 – ISRAELI FICTION IN TRANSLATION**

3–4 credits.

Major writers, trends and themes in Israeli fiction from pre-State period to present.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**JEWISH/ENGL 370 – JEWISH HUMOR**

3–4 credits.

What is humor? Why and when do people tell jokes? And what do we make of the fact that a certain form of humor has come to be labeled "Jewish"? Examine the notion of "Jewish humor" by reading a variety of texts (jokes, short stories, films, websites, conceptual art, and cultural kitsch). Begin by considering theoretical explorations of humor and "Jewish humor." Then trace techniques of Jewish humor from eastern Europe to central Europe to North America, paying specific attention to Jewish American humor. Themes to be examined include: in-group vs. out-group humor; humor and ethnicity; performance and "Jewface"; Jewish-Christian difference; humor and the Holocaust; gender and ethnicity; the notion of self-hatred; American popular culture; and the relationship between humor, repetition, and innovation. The general goal is to answer the question: Is there such a thing as "Jewish humor"? (Hint: The answer may be "no.")

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**JEWISH/HEBR-MOD 401 – TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE I**

3 credits.

Readings in Hebrew literature. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 302 or placement into JEWISH/HEBR-MOD/JEWISH 401**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frqn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**JEWISH/HEBR-MOD 402 – TOPICS IN MODERN HEBREW / ISRAELI LITERATURE AND CULTURE II**

3 credits.

Readings in Hebrew literature. Taught in Hebrew.

**Requisites:** JEWISH/HEBR-MOD/JEWISH 401 or placement into JEWISH/HEBR-MOD/JEWISH 402**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Frqn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**JEWISH/GNS 405 – FIRST SEMESTER YIDDISH FOR GRADUATE STUDENTS**

4 credits.

Introduction to the Yiddish language through speaking, listening, reading, and writing. Emphasis on communication with attention to cultural and historical context. Includes tasks designed to facilitate Yiddish-related research.

**Requisites:** Graduate/professional standing**Repeatable for Credit:** No

**JEWISH/ILS/SOC 423 – MODERN JEWISH THOUGHT**

3 credits.

How do Jews fit into the modern world? While the "Jewish Question" initially referred to debates about Jewish emancipation (the struggle for equal citizenship and social integration that started with the French Revolution), it later served to describe modern Jewish political and social thought about the identity, place, and role of the Jews in the modern world. Beginning in the late 19th century, as cultural assimilation, economic impoverishment in eastern Europe, and rising antisemitism sowed doubts about the viability of emancipation and traditionalism alike, Jewish thinkers proposed new answers to the Jewish question. Learn about some of the major answers they debated, including revolutionary universalistic utopias (socialism and Communism), various forms of Jewish nationalism, hyphenated identities, cultural pluralism, and cosmopolitanism. Work to contextualize these ideas historically while also considering whether and how they remain relevant to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JEWISH 430 – INTERMEDIATE TOPICS IN JEWISH LITERATURE**

3-4 credits.

Intermediate topics in Jewish literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**JEWISH 431 – INTERMEDIATE TOPICS IN JEWISH HISTORY**

3-4 credits.

Intermediate topics in Jewish history.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**JEWISH 432 – INTERMEDIATE TOPICS IN JEWISH PHILOSOPHY AND THE ARTS**

3-4 credits.

Intermediate topics in Jewish philosophy and the arts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**JEWISH 433 – INTERMEDIATE TOPICS IN JEWISH STUDIES: SOCIAL SCIENCES**

3-4 credits.

Intermediate topics in Jewish Studies drawn from the social sciences.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**JEWISH/PHILOS/RELIG ST 435 – JEWISH PHILOSOPHY FROM ANTIQUITY TO THE SEVENTEENTH CENTURY**

3 credits.

A survey of major philosophers and philosophical currents within Judaism from antiquity through the seventeenth century.

**Requisites:** Junior standing or 3 Credits in PHILOS**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**JEWISH/PHILOS 442 – MORAL PHILOSOPHY AND THE HOLOCAUST**

3 credits.

Selected moral and philosophical issues raised by the Holocaust such as when and whom to rescue; includes issues arising after the annihilation such as forgiveness and reconciliation.

**Requisites:** Sophomore standing or 3 Credits in PHILOS**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**JEWISH/CLASSICS 451 – BIBLICAL ARCHAEOLOGY**

3 credits.

An examination of current problems, methods, and trends in archaeological research in the lands of the Bible.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018

**JEWISH/AFRICAN/MEDIEVAL/RELIG ST 462 – MUSLIMS AND JEWS**

3 credits.

Explores the historical relationship between Muslims and Jews in a variety of contexts from the seventh century to the present. Surveys literary and cultural exchanges against the background of shifting political and social conditions across the Middle East, Europe, and the United States. Considers also the parallel legacies of anti-Semitism, Orientalism, and Islamophobia. Major themes include comparative religion, secularization, migration, and colonialism, as well as the politics of history and cultural memory. Introduces readings in English translation of medieval and modern texts originally written across languages, and especially in Hebrew and Arabic.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**JEWISH/GERMAN 510 – GERMAN-JEWISH CULTURE SINCE THE 18TH CENTURY**

3 credits.

Investigates German-Jewish culture since the 18th century, concentrating on toleration, emancipation, acculturation, assimilation, anti-Semitism, and Bildung.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**JEWISH/HEBR-BIB 513 – BIBLICAL TEXTS, POETRY**

3 credits.

Critical reading of selected texts from the Minor Prophets and the Writings.

**Requisites:** HEBR-BIB 324**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**JEWISH/HEBR-BIB 514 – BIBLICAL TEXTS, POETRY**

3 credits.

Critical reading of selected texts from the Latter Prophets and the Writings.

**Requisites:** HEBR-BIB/JEWISH 513**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**JEWISH/CURRIC/ED POL/HISTORY 515 – HOLOCAUST: HISTORY, MEMORY AND EDUCATION**

3 credits.

Explores the ways in which Holocaust history, memory and education are mutually entangled, politically charged and morally complex. Using primarily American sites of memory, critically analyze a variety of representations of the Shoah--in literature, films, memoirs, monuments, museums and classrooms.

**Requisites:** Junior standing**Course Designation:** Gen Ed - Communication Part B

Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JEWISH/HISTORY 518 – ANTI-SEMITISM IN EUROPEAN CULTURE, 1700-1945**

3 credits.

A critical review of major theories of anti-Semitism and a history of modern anti-Semitism.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**JEWISH/ENGL 539 – JEWISH LITERATURES IN DIASPORA**

3 credits.

An exploration of Jewish literature in English and in Anglophone contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**JEWISH/ENGL 593 – LITERATURE OF JEWISH IDENTITY IN AMERICA**

3 credits.

The construction of Jewish American identity within American life.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017



**JEWISH 630 – ADVANCED TOPICS IN JEWISH LITERATURE**

3-4 credits.

Advanced topics in Jewish literature.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**JEWISH 631 – ADVANCED TOPICS IN JEWISH HISTORY**

3-4 credits.

Advanced topics in Jewish history.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**JEWISH 632 – ADVANCED TOPICS IN JEWISH PHILOSOPHY AND THE ARTS**

3-4 credits.

Advanced topics in Jewish philosophy and the arts.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**JEWISH 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JEWISH 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JEWISH 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**JEWISH 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**JEWISH 699 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

## JOURNALISM AND MASS COMMUNICATION (JOURN)

**JOURN 150 – INTRODUCTION TO SPORTS COMMUNICATION**

3 credits.

Explore the central activities and concepts related to various communication professions involved in the realm of sports. These activities include sports journalism, sports broadcasting, sports marketing communications, and sports public relations. Consider major social issues that impinge upon these professions including how sports and media intersect with concerns associated with race and gender. Explore strategies to build careers in sports communications and beyond.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**JOURN 162 – MASS MEDIA IN MULTICULTURAL AMERICA**

3 credits.

An introduction to the roles and functions of print, film, electronic and digital media in multicultural America. International comparisons highlight differences and commonalities in the social and cultural position of mass media in societies with racially and ethnically diverse populations.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 163 – GENDER AND SEXUALITY IN MASS COMMUNICATION**

3 credits.

Exploration of the role that gender and sexuality both play in media representation, production, reception, and activism.

**Requisites:** Undergraduates only**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 175 – MEDIA FLUENCY FOR THE DIGITAL AGE**

3 credits.

The digital media landscape is rapidly evolving, and it has major ramifications on how we view and interact with political, social and economic landscapes. Become more fluent in digital media by examining current and emerging media and the issues and opportunities surrounding it, while producing and consuming digital media content. Being "digitally fluent" is considered a key 21st Century skill. So what does it mean to be fluent in digital media? It goes way beyond putting a "snap" on your Story or posting to Facebook. It's a matter of knowing which medium is best given what you want to say - and who you want to converse with! Critically examine and engage with this media landscape. Analyze how digital media content is created and digested by various audiences across social, political, and economic environments.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JOURN 176 – SPECIAL TOPICS IN MASS COMMUNICATION**

3 credits.

Special focus on a specific conceptual issue or topic involving mass communication.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**JOURN 201 – INTRODUCTION TO MASS COMMUNICATION**

4 credits.

How the mass media are organized and how they function in modern society; their technological basis, economic and political foundations, and social implications.

**Requisites:** Freshman, sophomore, or junior standing only**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JOURN 202 – MASS COMMUNICATION PRACTICES**

6 credits.

Build increasingly sophisticated communication skills, including writing, editing, gathering information, working with data, and presenting stories through varying media forms. Develop an appreciation of how different media influence message design by communicators and reception by audiences. Develop a complex toolkit of conceptual and practical skills for media work in journalism, strategic communication, and hybrids. Build writing skills and critical thinking abilities, two elements common to success in any field.

**Requisites:** Declared in a Journalism undergraduate program and JOURN 201 and concurrent enrollment in JOURN 203**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JOURN 203 – INFORMATION FOR COMMUNICATION**

3 credits.

Develop information skills - information collection, information verification, information analysis, and information presentation (the CVAP approach) - that are used by professionals in journalism and strategic communication. Includes practical techniques that enhance basic skills related to the collection, evaluation, analysis and presentation of information. These skills will provide a foundation for the major and in journalism and mass communication careers.

**Requisites:** Concurrent enrollment in JOURN 202**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**JOURN 335 – PRINCIPLES AND PRACTICES OF REPORTING**

4 credits.

Basic reporting for print and electronic media. Bring together technical and conceptual skills by creating a variety of print, audio, and web-based news stories on a current public issue.

**Requisites:** JOURN 202 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**JOURN 345 – PRINCIPLES AND PRACTICE OF STRATEGIC COMMUNICATION**

4 credits.

Introduction to strategic communication for students interested in advertising, public relations, health communications, and political campaigns.

**Requisites:** JOURN 202 or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 350 – SPORTS MARKETING COMMUNICATIONS**

3 credits.

Explore various activities related to the promotion domain of sports marketing including marketing research, sports branding, image management, advertising promotion, event promotion, sports sponsorships, and public relations. Examine each of these activities, and focus on the marketing communications associated with each of these activities.

**Requisites:** JOURN 150 or 202

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN/POLI SCI/URB R PL 373 – INTRODUCTION TO SURVEY RESEARCH**

3 credits.

Theory and practice of survey research; planning, sampling, questionnaire construction, interviewing, content analysis, machine tabulation, analysis of data; two hours lecture; two hours lab or field work. Not open to students with credit for POLI SCI 544 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 401 – IN-DEPTH REPORTING**

4 credits.

Advanced reporting with emphasis on critical evaluation of evidence and on recognizing the complex effects of government actions. Explore and develop community context stories that originate in a range of venues from the courts to the schools.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 404 – INTERPRETATION OF CONTEMPORARY AFFAIRS**

4 credits.

Preparing and writing of editorials, columns and news analyses.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**JOURN 405 – CREATIVE NONFICTION**

4 credits.

Creative elements of non-fiction story telling to develop skills necessary for writing across the journalistic spectrum, from newspapers to magazines to books.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 411 – MULTIMEDIA DESIGN**

4 credits.

Visual communication and graphic design in multimedia contexts. Build design and production techniques to relay creative messages through print and digital media. Content explores design theory and techniques, as well as the effects and ethics of visual media messages.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 415 – SCIENCE AND ENVIRONMENTAL JOURNALISM**

4 credits.

Instruction and practice in strategies for communicating science to the public. Emphases include (1) how to explain difficult concepts and processes; (2) skills for telling interesting and artful stories; and (3) strategies for making reasonable judgments about scientific evidence.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**JOURN 417 – MAGAZINE PUBLISHING**

4 credits.

Integrated, in-depth approach to magazine management, writing, editing and design. Covers the magazine industry from both the editorial and business ends, bringing together journalism and strategic communication students. Includes production of Curb magazine in print, online and mobile formats.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 420 – INVESTIGATIVE REPORTING**

4 credits.

Techniques of investigative and long-form enterprise reporting. Includes extensive reporting in the field and a final project.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 425 – VIDEO JOURNALISM**

4 credits.

Video journalism is widespread, thanks to online news and sources such as YouTube. Create news stories using the techniques of videography, digital editing, writing and producing. Video journalism is unique in its language, requiring engaging material, a fast start, sharp focus, short narrative and natural voices. Focus on capturing stories with strong visuals and ambient sound of the people affected by issues and events.

**Requisites:** JOURN 335 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 426 – COMMUNITY-BASED REPORTING**

4 credits.

Provides advanced, targeted instruction in reporting that pays close attention to neighborhoods or very small communities (subcommunities), also known as hyperlocal reporting. These small communities can be defined by geographic boundaries or boundaries of shared topical interest. Locate community-based reporting's place in the larger media ecology of mainstream media (newspapers, TV, weekly papers, magazines, independent websites, etc.), and investigate how local journalism's place in changing media ecologies helps (or discourages) people from becoming active citizens in a democracy.

**Requisites:** JOURN 335

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**JOURN 445 – CREATIVE CAMPAIGN MESSAGES**

4 credits.

Introduction to the creative aspects of message development for advertising, public relations, and other strategic communications.

**Requisites:** JOURN 345 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 447 – STRATEGIC MEDIA PLANNING**

4 credits.

Introduction to media planning for students interested in careers in advertising, public relations, or other forms of strategic communication.

**Requisites:** JOURN 345 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JOURN 449 – ACCOUNT PLANNING AND STRATEGY**

4 credits.

Process of planning, implementing, and analyzing strategic communication campaigns.

**Requisites:** JOURN 345 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 450 – ADVANCED SPORTS COMMUNICATION**

4 credits.

Core skills and issues of communicating about sports to a mass audience in a changing media landscape, as well as advice and support in starting a sports communication career including access to professionals in the field. Utilizes professional, historical and theoretical perspectives in helping participants gain proficiency in disseminating information about sports-related events and topics for informative and strategic purposes, while developing a sense of the role of sport in contemporary society.

**Requisites:** JOURN 150, 335, or 345

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 453 – STRATEGIC MEDIA RELATIONS**

4 credits.

Develop the advanced practical skills and conceptual understanding necessary to function impressively as an entry-level professional in media relations, i.e., transmitting news to mass communicators in traditional and interactive media on behalf of a client or organization.

**Requisites:** JOURN 335 or 345

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**JOURN 455 – EMERGING MEDIA AND THE NEWS**

4 credits.

Tools and platforms with which to produce professional content for publication. Examples for course topics will include social media, multimedia and other new technologies that professional communicators must master.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**JOURN 456 – LONG FORM VIDEO**

4 credits.

Develop skills needed to conduct professional-level journalism and strategic communication in long-form video. Produce documentary pieces of covering a contemporary topic of local or regional interest and complete other exercises in video analysis, composition and production.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**JOURN 457 – STORYTELLING THROUGH SOUND**

4 credits.

Audio storytelling as an art form, with a focus on creating a series of episodic long-form audio storytelling segments. Develop interview and writing skills, as well as field recording and editing techniques. Develop personal style and voice, while learning practical skills necessary to write and produce audio content for over the air or online.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 463 – DIGITAL MEDIA STRATEGIES**

4 credits.

Provides an overview of digital media from an objective, strategy, and tactical planning perspective within strategic communication media and promotion campaigns.

**Requisites:** Declared in a Journalism undergraduate program and JOURN 345

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 464 – PUBLIC RELATIONS STRATEGIES**

4 credits.

Provides an overview of public relations from an objective, strategy, and tactical planning perspective within strategic communication campaigns. Investigates one core element of a strategic communications campaign and provides an in-depth study into the topic area of public relations.

**Requisites:** JOURN 345

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 465 – SOCIAL MEDIA MARKETING COMMUNICATIONS**

4 credits.

Provides an overview of social media marketing planning and buying from an objective, strategy, and tactical perspective within strategic communication campaigns. Investigate one core element of a strategic communications campaign, and provides an in-depth study into the topic area of digital media.

**Requisites:** Declared in a Journalism undergraduate program and JOURN 345

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 470 – STRATEGIC COMMUNICATION CAMPAIGNS CAPSTONE**

4 credits.

Provides a grounding in advanced principles of strategic communication campaign development and execution, further developing skills used in creating advertising and marketing communications, focusing on research, strategy, copy and design, media, and public relations/promotions.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**JOURN 475 – SPECIAL TOPICS IN ADVANCED CONCEPTS AND SKILLS**

1-4 credits.

Exploration of a particular set of concepts and skills in more depth. Subject will vary.

**Requisites:** JOURN 335, 345, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN/HISTORY 560 – HISTORY OF U.S. MEDIA**

4 credits.

Evolution of the mass media in the United States in the context of political, social, and economic change.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 561 – MASS COMMUNICATION AND SOCIETY**

4 credits.

Relationships between mass communications and society; analysis and evaluation of media performance and of suggestions for change.

**Requisites:** Junior standing; not open to special students

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 563 – LAW OF MASS COMMUNICATION**

4 credits.

Freedom of speech and press with particular emphasis on major legal issues confronting media practitioners; introduction to such areas of law as censorship, libel, invasion of privacy, access to information, regulation of electronic media and commercial speech.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 564 – MEDIA AND THE CONSUMER**

4 credits.

Advertising and other mass media content from the consumer's viewpoint; consumer's need and opportunities for information, and use of opportunities; consumer evaluation of media performance, guidelines for effective use; alternative means for obtaining information; implications of consumer movement.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 565 – EFFECTS OF MASS COMMUNICATION**

4 credits.

Use and effects of mass communication for individuals and societies. Examines who is affected, what effects occur and how much, what different media content is involved and what situations make effects more or less likely.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**JOURN 566 – COMMUNICATION AND PUBLIC OPINION**

4 credits.

The role of the mass media of communication in the formation of public opinion. Propaganda goals of government, political, economic, and social groups.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 601 – COLLOQUIUM IN PROFESSIONAL COMMUNICATION CAREERS**

1 credit.

Explores a wide variety of post-undergraduate communication career options available in Journalism. Topics related to job hunting, resume writing, and networking are also covered. Focuses on opportunities and challenges in a wide variety of communication fields, from advertising and public relations to radio, newspapers and TV broadcasting. Guest speakers or panelists will span different sectors (agencies, corporations, nonprofits, higher education, government, etc.).

**Requisites:** Declared in a Journalism undergraduate program

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN/COM ARTS/HDFS 616 – MASS MEDIA AND YOUTH**

3 credits.

Children's and adolescents' use of mass media and mass media effects on them. Particular attention is given to changes in comprehension and other cognitive activities that give insights into media use and effects.

**Requisites:** JOURN 202, COM ARTS 325, HDFS 262 (or HDFS 362 prior to Fall 2023), ED PSYCH 320, PSYCH 460, or LSC 251 (or PSYCH 560 prior to Fall 2017)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**JOURN/COM ARTS/LSC 617 – HEALTH COMMUNICATION IN THE INFORMATION AGE**

3 credits.

Examines the role of communication in health, how the revolution in information technology has affected health communication, and the assumptions about health information and communication that drive current efforts to use technologies.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 618 – MASS COMMUNICATION AND POLITICAL BEHAVIOR**

4 credits.

Interrelationships of news media, political campaigning, and the electorate. Impact of media coverage and persuasive appeals on image and issue voting, political participation and socialization.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 620 – INTERNATIONAL COMMUNICATION**

4 credits.

Historical, political, economic and cultural trends in global mass communication systems.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 621 – MASS COMMUNICATION IN DEVELOPING NATIONS**

4 credits.

Development, structure, and role of mass communication systems in Africa, Asia, and Latin America.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**JOURN 622 – THE IMPACT OF EMERGING MEDIA**

3 credits.

Provides an introduction to the literature and research on emerging communication technologies (e.g., blogs, social media, massively multiplayer games, mobile devices) and the effects of these technologies on the individual and societal levels. Illuminates the psychological, social, political, industrial, and policy implications of the use of emerging communication technologies. Become equipped with a basic social and scientific understanding of the interplay between technology, individuals, and society, and recurring issues concerning the adoption and usage of new communication technologies. Emphasizes empirical approaches to understanding these relationships, delving into contexts such as journalism, strategic communication, and the place of digital media in politics and society.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN/ART HIST/HISTORY/L I S 650 – HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA**

3 credits.

History of books and print culture in the West from ancient times to the present. Focus on the influence of reading and writing on social, cultural, and intellectual life. Methodologies, theories, and sources for study of book and print culture history.

**Requisites:** Graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**JOURN 651 – SPORTS CONTROVERSIES & COMMUNICATION PROFESSIONS**

3 credits.

Exploration of a number of prominent controversies that pervade the realm of sports and engage the activities of sports communication professionals (such as sports journalists, broadcasters, marketers and public relations specialists). Discuss the issues involved in these controversies, and pay special attention to the way they impinge upon professional practices.

**Requisites:** JOURN 150, 162, 201, or Junior Standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022

**JOURN 658 – COMMUNICATION RESEARCH METHODS**

4 credits.

Survey of methods for investigating mass communication process and effects.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN/ASIAN AM 662 – MASS MEDIA AND MINORITIES**

4 credits.

Representations of minority groups in U.S. news and entertainment mass media. Historical, social, political, economic, and other factors influencing the mass mediated depictions of minorities.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JOURN 664 – SOCIAL NETWORKS IN COMMUNICATION**

3 credits.

Examines key concepts in social network theory and develops and applies them to the field of communication. Attention is paid to the differences between social and online networks, as well as their relationships. Explores major concepts and questions in social network theory and analysis, including the elements that make up a network; network relationships (e.g. homophily, knowing others like ourselves); the construction of whole social networks out of dyads (two people) and triads (three); strong and weak ties; roles and positions; groups, cliques, and clusters; as well as small worlds and communities. Emphasis will be on what these concepts mean and how they work. There will be minimal introduction to technical network analysis and hands- on work.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**JOURN 669 – LITERARY ASPECTS OF JOURNALISM**

3 credits.

Critical reading of the best reporting and writing.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 670 – COMMUNITY SERVICE LEARNING: TECHNOLOGY FOR SOCIAL CHANGE**

3 credits.

Integrates the study of the social impact of new communication technologies into community engagement practices. Illuminates social, political, psychological, and policy implications of the adoption and use of new and emerging technologies and provides an educational opportunity to apply the knowledge and skills obtained from the class to a local, community-based collaborative project (i.e. integrated social media campaign) that aims to strengthen the community. This collaborative project is a hands-on experiment that demonstrates how to use new communication technologies for social change.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**JOURN 675 – TOPICS IN GOVERNMENT AND MASS MEDIA**

3 credits.

Analysis of political and legal relationships between mass communication and government with emphasis on current problems and issues.

**Requisites:** Senior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN 676 – SPECIAL TOPICS IN MASS COMMUNICATION**

1-4 credits.

In-depth analysis of a conceptual mass communication issue.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN/L I S 677 – CONCEPTS AND TOOLS FOR DATA ANALYSIS AND VISUALIZATION**

3 credits.

An introduction to information and data visualization: introduction to major concepts, instruction in specific tools for data analysis and visualization, and application of skills in a final project.

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 678 – LEGAL & ETHICAL DIMENSIONS OF EMERGING MEDIA**

3 credits.

Examines the legal and ethical questions surrounding digital media and their effects on society and individuals.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**JOURN 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 691 – SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**JOURN 692 – SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**JOURN 697 – INTERNSHIP**

1-3 credits.

Advanced directed study projects as arranged with a faculty or instructional academic staff member, based on internship experience.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN 698 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2010

**JOURN 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN 800 – ADVANCED MASS MEDIA PRACTICE**

3 credits.

Advanced projects in professional practice in mass media.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**JOURN 801 – MASS COMMUNICATION AND THE INDIVIDUAL**

3 credits.

Theory and research on individuals' use of mass communication and effects of mass communication. Topics include choice, selection and functions of mass media use, attention and cognitive processing, information effects, persuasion and emotion/involvement, and social and behavioral effects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JOURN 802 – MASS COMMUNICATION AND SOCIETY**

3 credits.

Examines systematic procedures for theory building and comparison of theories of communication processes between mass media and other societal institutions and their relationships with both individuals and micro-social systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 803 – MASS COMMUNICATION AND CULTURE**

3 credits.

Intensive readings focusing on the critical studies and/or cultural studies traditions in mass communication theory and research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**JOURN/HISTORY 808 – MASS COMMUNICATION HISTORY**

3 credits.

Intensive reading and discussion designed to introduce literature of mass communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**JOURN/LSC 811 – CONCEPTUALIZATION AND DESIGN OF MASS COMMUNICATION RESEARCH**

2-3 credits.

Assists students in turning research questions into substantive research designs with understanding of the concepts involved. For most students, the final product will be a well-developed thesis or dissertation proposal.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**JOURN 812 – QUALITATIVE COMMUNICATION RESEARCH METHODS**

3 credits.

Research methodology. Design research, analyze and interpret evidence, and develop a deeper appreciation of research strategies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 813 – PRACTICUM IN COMMUNICATION RESEARCH**

3 credits.

Detailed practicum on conducting and publishing empirical research in mass communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JOURN 818 – COMPUTATIONAL APPROACHES TO COMMUNICATION RESEARCH**

3 credits.

Surveys major computational approaches and analytical tools that are promising in advancing communication research and practices in the modern digital information environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN 821 – HEALTH COMMUNICATION**

3 credits.

Application and integration of theory in understanding the effects of mass media, with close attention to health communication campaign messages.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 822 – GLOBAL COMMUNICATION**

3 credits.

Readings and discussion focussing on global media issues. Topics may include news flow, cultural imperialism, representations, history and political economy, globalization trends, new technologies, mass media and nation building, communication and grassroots politics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**JOURN/ENVIR ST/LSC 823 – SCIENCE AND ENVIRONMENT COMMUNICATION**

3 credits.

Tracks the evolution of mass media coverage of science and the environment. Emphasis on how journalists utilize evidence, the influence of scientific and journalistic norms on stories, and the effects of mass media on science and environment messages to the public.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**JOURN 824 – RACE, ETHNICITY AND MEDIA**

3 credits.

Examines key theoretical and empirical readings in the area of race/ethnicity and media.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**JOURN/LSC 825 – ETHICS AND COMMUNICATION**

3 credits.

Explores critical media ethics questions shaped by practices in a disruptive digital environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**JOURN/LSC 826 – JOURNALISM THEORY**

3 credits.

Focus on the content and purposes of journalism, explores cultural values associated with journalism, relationships between journalism and other institutions, and current issues facing journalists at a time when the profession faces many challenges.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN/GEN&WS 828 – GENDER AND SEXUALITY IN MASS COMMUNICATION**

3 credits.

A scholarly theory overview on gender and sexuality in communication studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN/POLI SCI 829 – POLITICAL COMMUNICATION**

3 credits.

This course examines the role of communication in American politics.

Topics covered include the communication of politics (e.g., communication by politics elites, effects of mass media and interpersonal communication on political attitudes) as well as the politics of communications (regulation of political communication, policy issues, etc.).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**JOURN/COM ARTS/LSC 831 – PSYCHOLOGY OF ENTERTAINMENT MEDIA**

3 credits.

Provides an in-depth look into entertainment media, including its effects on individuals, social groups, and society. The focus on entertainment content is across platforms - from "mass" to social media. Emphasis will be paid to psychological, individual-level effects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**JOURN/LSC 833 – TECHNOLOGY AND SOCIETY**

3 credits.

Considers the effects of new communication technologies on everyday life and political mobilization.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**JOURN/LSC 834 – COMMUNICATION AND SOCIAL THEORY**

3 credits.

Looks at key questions in social theory from the 20th century and provides concepts and analytical frameworks to think carefully about how networks work and what they do at different levels of society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**JOURN 835 – NEWS FRAMING AND SOCIAL PROTEST MOVEMENTS**

3 credits.

Addresses the multi-disciplinary theory and research that have contributed to our understanding of both the antecedents and consequences of mediated messages as they impinge upon processes related to social protest. Draws from literature in mass communication, political science, sociology, psychology and other disciplines to examine questions about the role of communication media in the dynamics of social protest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**JOURN 880 – TOPICS IN MASS COMMUNICATION**

3 credits.

In-depth investigation of a specific topic in mass communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**JOURN 901 – COLLOQUIUM IN MASS COMMUNICATION**

1 credit.

Research presentations by mass communication scholars, and is designed to acquaint graduate students with theoretical and methodological approaches to the study of communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**JOURN 902 – GRADUATE TEACHING COLLOQUIUM**

1 credit.

Colloquium series in fields related to communication and information studies. Teaching presentations on various theoretical and practical approaches to teaching and learning in the communication and information fields.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**JOURN 903 – PROFESSIONAL MASTER'S COLLOQUIUM**

1 credit.

Expands the toolkit of skills and experiences through direct work with working journalists and communication professionals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**JOURN 990 – THESIS**

1-9 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**JOURN 999 – INDEPENDENT RESEARCH PROBLEMS**

2-4 credits.

Advanced level mentored reading and research for dissertators.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# KINESIOLOGY (KINES)

**KINES 100 – EXERCISE, NUTRITION, AND HEALTH**

2 credits.

Guidelines and assessment methods for fitness and nutrition. Motivation, adherence and stress-reduction techniques discussed. Lecture-demonstration concerning effects of exercise and nutrition on health and well-being.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 104 – AQUATICS**

1 credit.

Attainment and maintenance of a high degree of personal efficiency in swimming strokes and proficiency in fundamental aquatic skills, and an understanding of the fundamental physiological, mechanical and kinesiological principles as they relate to aquatic performance.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**KINES 112 – MAKE IT COUNT: MEASURING PHYSICAL ACTIVITY BEHAVIOR**

3 credits.

Define exercise and physical activity behaviors and how to systematically measure them. Content will encompass the American College of Sports Medicine definition of physical activity and recommendations for exercise across different populations. Students will engage in a service learning opportunity with our adapted fitness program where they will practice measuring and addressing the difficulties in broadly defining physical activity.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**KINES 115 – PHYSIOLOGY OF HUMAN PERFORMANCE**

3 credits.

Humans are capable of achieving astonishing performances in athletics, in work and in other extraordinary situations. These extraordinary performances often provide important insights into physiological processes and their limits. This course integrates information from biology, chemistry, psychology, mechanics, etc., to understand the factors that determine and limit human performance from the molecular level all the way up to whole body movement. The emphasis in the class is on using case studies to investigate physiological processes underlying movement, exercise, and performance.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**KINES 116 – FIRST AID AND BASIC LIFE SUPPORT**

2 credits.

Techniques and procedures to deal effectively with common emergencies. Includes training in airway obstruction, cardiopulmonary resuscitation, automated external defibrillation, injuries, and medical emergencies.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 119 – INTRODUCTION TO KINESIOLOGY**

2 credits.

Introduces students to the field of kinesiology and the Department of Kinesiology at the University of Wisconsin-Madison. Introductory material about physical activity and health will be provided, and career opportunities in kinesiology will be discussed.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 121 – FOUNDATIONS OF PHYSICAL EDUCATION**

2 credits.

Introduction to physical education teaching, movement education, and an operational understanding of the scientific study of human movement. Lecture and lab.

**Requisites:** Classified as Pre-Physical Education**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 123 – LIVING WELL: LIFESTYLE REDESIGN AND HEALTH PROMOTION FOR COLLEGE STUDENTS**

2 credits.

Focuses on the application of biological, cultural and social theory and research to lifestyle change. There will be lectures by experts, experiential learning, and the application of course knowledge to student's lives through class assignments and activities. The transition to college requires students to construct a new lifestyle, take on new and greater personal responsibilities while at the same time meet rigorous academic challenges. This transition includes a loss of structured daily schedules, decreased family support for the day to day living, and greater responsibility for their finances and life choices. Students may have difficulty managing their time, exercise less, eat less healthy foods, engage in increased drinking of alcohol, and experience greater stress and depression when adjusting to college life. This life transition provides an opportunity for reexamination and an opportunity to make thoughtful choices about lifestyle.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 125 – ADAPTED FITNESS AND PERSONAL TRAINING**

1 credit.

Fitness class for developing individualized personal goals. Accommodates persons having temporary or permanent disability. Alternative to dropping from other program classes due to injury or other medical reason.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 127 – INTRODUCTION TO ATHLETIC HEALTHCARE**

2 credits.

Issues and basic concepts of athletic healthcare including health care systems, interprofessional teams, and injuries and conditions common to active populations. Emphasis on the team approach to patient care with exposure to a variety of health science professions.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 129 – INTRODUCTION TO YOGA PRACTICE**

1 credit.

An introduction to yoga practice, philosophy, history, and traditions.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2015**KINES 140 – SCIENCE AND PRACTICE OF RESISTANCE TRAINING**

2 credits.

Lectures and demonstrations on the principles of resistance training and associated physiological effects designed for practitioners who wish to gain a detailed understanding of the science of resistance training.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 141 – THE SCIENCE & PRACTICE OF MARATHON/DISTANCE RUNNING**

2 credits.

Advanced running course. Principles of long distance/marathon running are discussed and applied; provides a foundation for high level aerobic fitness. Lecture/discussion in areas of biomechanics, nutrition, training principles and programs, physiology, and running performance. Tempo/endurance featured throughout course. This course is intended for students who run 15 + miles/week.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2016**KINES 145 – CHOOSING TO MOVE: CONSTRUCTING AN ACTIVE LIFESTYLE**

2 credits.

Will promote physical activity at a level to achieve health benefits, particularly in students who currently are insufficiently active (less than 150 minutes each week of moderate intensity physical activity). Students will apply course materials (e.g., behavior change strategies) to their own lives by completing self-analysis of their physical activity levels and then developing a physical activity plan to increase current physical activity levels, as well as a plan to maintain the activity after the course has ended.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2020

**KINES 147 – TAI CHI CH'UAN**

1 credit.

Learn and practice 24-movement Yang Style Tai Chi Form and Animal Frolic Qi Gong Form.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2015**KINES 150 – FOUNDATIONS OF HEALTH BEHAVIOR AND HEALTH EQUITY**

3 credits.

Provides students with an overview of the personal, interpersonal and broader social factors that contribute to the health and well-being of individuals and populations in the United States. Examinations of contemporary approaches to health education and health behavior interventions including: Foundations of health education and health behavior programs, health indicators, social and structural determinants of health and health disparities, models of health education/health behavior that support interventions for individuals and communities.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 197 – TECHNIQUES IN ATHLETIC TRAINING**

1 credit.

An applied clinical approach to basic skills commonly used in the field of athletic training. Designed for students interested in athletic training, and an appropriate elective for those who plan to teach or coach.

**Requisites:** Classified as Pre-Kinesiology or Pre-Physical Education**Repeatable for Credit:** No**Last Taught:** Spring 2020**KINES 200 – INTRODUCTORY NEUROSCIENCE**

4 credits.

Entry-level course provides a systematic introduction to the mammalian nervous system, with emphasis on the structure and function of the human brain. Topics include the function of nerve cells, sensory systems, control of movement, learning and memory, and diseases of the nervous system. The foundational knowledge covered in this course serves students interested in health sciences majors, as well as non-science students interested in neuroscience and its relation to human health, wellness, and disease.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**KINES 225 – PRACTICUM IN PROMOTING ACTIVITY FOR DIVERSE ABILITIES**

1 credit.

Focused and rooted on the application of biological, cultural, social, and research-based practices for professional development in promoting physical activity for everyone, especially those with a variety of disabling conditions. Work as individuals or teams to plan and implement specified physical activities for individuals with diverse abilities in a variety of settings, including the adapted fitness gym, recreational and competitive endeavors and the home-based exercise.

**Requisites:** None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, for 10 number of completions**Last Taught:** Spring 2023**KINES 227 – INTRODUCTION TO CLINICAL ANATOMY OF HUMAN MOVEMENT**

2 credits.

Designed to provide students with a foundational knowledge in musculoskeletal anatomy and anatomical considerations related to human movement and physical activity.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 240 – METHODS OF TEACHING INVASION GAMES AND SPORTS**

1 credit.

An examination of differences and similarities of various invasion games. Sequencing of skills and development of concepts to produce effective performance. Instruction in the teaching of invasion games to incorporate individuals of all ability levels.

**Requisites:** Declared in Physical Education, Kinesiology, or classified as Pre-Physical Education**Repeatable for Credit:** No**Last Taught:** Spring 2015**KINES 250 – SEDENTARY BEHAVIOR IN THE U.S. AND ABROAD**

3 credits.

Examines sedentary behavior, physical activity, physical inactivity, and associations with health outcomes in the United States and across the world. Topics include the determinants and consequences of sedentary behavior in children, adults, and special populations. Research examining psychological outcomes of sedentary behavior and barriers to adopting a physically active lifestyle is covered. Emphasis placed on Portuguese socio-cultural context, economic systems, and healthcare structures contributing to health outcomes. Compares the U.S. and European health models and physical activity guidelines. Design a sedentary behavior intervention informed by theories of behavior change.

**Requisites:** None**Repeatable for Credit:** No

**KINES 300 – PRACTICUM IN KINESIOLOGY**

1-3 credits.

Supervised experience in a specialized area of physical education.

**Requisites:** Declared in Kinesiology and KINES 314 or 427

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**KINES 301 – ADVANCED TECHNIQUES IN ATHLETIC TRAINING**

2 credits.

Provides future athletic training professionals a foundation in advanced athletic training techniques. Sample topics include: injury prevention, emergency care, orthopedic appliance applications, protective equipment, environmental considerations, and computer applications.

**Requisites:** Declared in Athletic Training

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**KINES 308 – BIOMECHANICS OF PHYSICAL ACTIVITY**

2 credits.

Provides a comprehensive study of biomechanical foundations and principles underlying physical activity. Topics include musculoskeletal determinants of human movement, analysis of sports skills, feedback, and cueing techniques. Includes descriptions and applications of biomechanical concepts related to skillful movement, physical activity, and fitness.

**Requisites:** MATH 112 and Classified as pre-Physical Education or declared in Physical Education

**Repeatable for Credit:** No

**KINES 312 – TECHNOLOGY FOR PHYSICAL ACTIVITY AND HEALTH PROFESSIONALS**

2 credits.

Designed to provide students with creative technology strategies in the fields of school wellness education, physical activity, and fitness management. Students will build skills for using widely available technology resources to enhance instruction, assessment, motivation, communication, and advocacy in health and fitness settings. Skill-specific units present experiential assignments that increase learner confidence. Each unit produces print or digital materials for practical professional use with an emphasis on innovation.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**KINES 314 – PHYSIOLOGY OF EXERCISE**

4 credits.

Fundamental knowledge about, and appreciation for, the adaptability of human physiological systems in meeting a range of exercise demands.

**Requisites:** PHYSIOL 335, ANAT&PHY 335, or KINES 235

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 315 – ASSESSMENT AND RESEARCH IN PHYSICAL ACTIVITY PEDAGOGY**

3 credits.

Topics and laboratory experiences will focus on parameters that are measured in physical activity pedagogy; instruments for measuring physical activity, health related fitness, knowledge, and psychological characteristics; concepts of assessment and research, basic statistical methods; and action research.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and declared in Physical Education

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 316 – ADAPTED PHYSICAL ACTIVITY**

3 credits.

An understanding of foundations, assessment and pedagogy for individuals with disabilities in a variety of physical activity settings. Emphasis on individual differences, life-span, and self-actualization.

**Requisites:** KINES 328, 337, or ANAT&PHY 337

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 317 – EVALUATION AND DIAGNOSIS OF ORTHOPEDIC CONDITIONS**

4 credits.

The evaluative skills and knowledge needed for minimum competency in the recognition, evaluation, and diagnosis of orthopedic conditions common to active populations.

**Requisites:** Declared in Athletic Training

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**KINES 318 – BIOMECHANICS OF HUMAN MOVEMENT**

3 credits.

Analysis of human action through the application of mechanical principles.

**Requisites:** (ANATOMY/KINES 328, 329, KINES 337, 338, ANAT&PHY 337, or 338) and (MATH 112 or placement in MATH 113)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 325 – GROUP DEVELOPMENT AND BEHAVIOR MANAGEMENT**

3 credits.

Provide students with opportunities and experiences to learn and participate in the development of groups. Provide students with strategies and experiences in the management of behaviors and techniques to maintain a safe and productive teaching environment.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 327 – CURRENT TOPICS IN OUTDOOR PURSUITS**

1 credit.

Introduce students to several outdoor activities to enable the teaching of these topics.

**Requisites:** KINES 370

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**KINES 330 – RESEARCH IN KINESIOLOGY**

2 credits.

The research process as applied in kinesiology, including hypothesis development, ethical issues, study design, measurement and statistical concepts, and presentation of results. Includes exposure to current research within the Department of Kinesiology.

**Requisites:** MATH 112 or placement in MATH 113 and (STAT 371, 301, or PSYCH 210)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 350 – INTRODUCTION TO EXERCISE PSYCHOLOGY**

3 credits.

Emphasis on the psychological foundations of exercise with motivational techniques, perception of effort, personality dynamics, and mental health serving as the focal points.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 353 – HEALTH AND PHYSICAL EDUCATION IN A MULTICULTURAL SOCIETY**

3 credits.

Explores aspects and perspectives of diversity and culture, the concepts and importance of culturally responsive teaching, health education, and the Act 31 requirement for teacher education students. Perform a cultural self-mapping to become knowledgeable of how cultural background influences personal attitudes and actions, and attend a cross-cultural event to experience life in "another person's shoes." Engage in a multicultural field experience.

**Requisites:** Declared in Physical Education or Health Promotion and Health Equity, junior standing, and Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**KINES 355 – SOCIO-CULTURAL ASPECTS OF PHYSICAL ACTIVITY**

3 credits.

An introduction to the philosophy of physical activity/education, history of physical activity/education and sport, and sociology of sport.

**Requisites:** Declared in Kinesiology or Physical Education and Satisfied Communication A requirement

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 357 – THERAPEUTIC STRATEGIES IN ATHLETIC TRAINING I**

4 credits.

A study of therapeutic intervention strategies used by athletic trainers. Evidence guided principles and clinical applications of therapeutic exercise, use of physical agents, indications and contra-indications, program design, progression, and standard documentation.

**Requisites:** KINES 317

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**KINES 358 – THERAPEUTIC STRATEGIES IN ATHLETIC TRAINING II**

4 credits.

A study of therapeutic intervention strategies used by athletic trainers. Evidence guided principles and clinical applications of therapeutic exercise, use of physical agents, indications and contra-indications, program design, progression, and standard documentation. A continuation of KINES 357.

**Requisites:** KINES 357

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**KINES 360 – LIFESPAN MOTOR DEVELOPMENT**

3 credits.

Designed to introduce the student to major concepts and terminology in the field of human motor development. The content includes a description of how movement changes across the lifespan and the factors that influence and/or correlate with the changes. The Mountain of Motor Development model will help organize understanding of human motor development.

**Requisites:** Declared in Kinesiology, Athletic Training or Promoting Activity for Diverse Abilities certificate

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 361 – MOTOR LEARNING AND PERFORMANCE**

3 credits.

A basic and up-to-date view of the major processes and mechanisms underlying the performance and learning of motor skills. Principles in motor learning and control are systematically introduced to produce a meaningful conceptual framework.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 364 – ASSESSMENT AND PROGRAMMING IN ADAPTED PHYSICAL EDUCATION**

3 credits.

Physical education methods, programs and assessment procedures related to individuals with a variety of disabilities.

**Requisites:** KINES 315 and 316

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**KINES 365 – PRACTICUM: ADAPTED PHYSICAL EDUCATION**

2 credits.

A practicum experience for individuals who are emphasizing the area of Physical Education/Special Populations. Six hours per week working with individuals who have disabling conditions.

**Requisites:** None**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**KINES 370 – PLANNING, FACILITATING & ASSESSMENT IN MOVEMENT AND HEALTH PROFESSIONALS**

3 credits.

Builds a repertoire of instructional skills and strategies such as organizing, planning, implementing and assessing developmentally appropriate learning tasks that are aligned with local, state, and national standards to address the diverse needs of participants.

**Requisites:** Declared in Physical Education or Health Promotion and Health Equity**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 371 – METHODS AND PRACTICUM OF TEACHING PK-12 DANCE AND GYMNASTICS**

3 credits.

Methods of instruction in movement concepts, educational dance and gymnastics. Students will gain practice in planning, teaching, and assessing participants. Students will also observe, practice, and assess the facilitation skills of health and physical activity professionals. In addition, students will apply the concepts presented in KINES 370.

**Requisites:** Declared in Physical Education and KINES 370 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 372 – METHODS AND PRACTICUM OF TEACHING PK-12 EDUCATIONAL GAMES AND FITNESS**

3 credits.

Methods of instruction in motor skills, educational games and fitness. Students will gain practice in planning, teaching, and assessing participants. Students will also observe, practice and assess the facilitation skills of health and physical activity professionals. In addition, students will apply the concepts presented in KINES 370.

**Requisites:** Declared in Physical Education and KINES 370 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 373 – METHODS AND PRACTICUM OF TEACHING 6-12 PHYSICAL EDUCATION**

4 credits.

Practice in planning and teaching sport concepts and skills. Builds on the planning for learning and instruction foundation. Centered on the Tactical Games, Sport Education, Fitness Education, and Personalized Instruction models and focuses on students developing teaching competencies rather than learning specialized sports skills. Adapt instruction within tactically similar sports.

**Requisites:** KINES 372**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 375 – PRACTICUM IN PHYSICAL EDUCATION**

3 credits.

Provides opportunities for the physical education student to develop competencies in the teaching skills necessary to provide quality Physical Education to children and youth. Students will receive individualized feedback about their performance from the cooperating teacher and the university supervisor. Provide a forum for students to learn from their peers through discussions, sharing their experiences and knowledge gained from their practicum placement.

**Requisites:** KINES 371, 372, and 373**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2019**KINES 387 – THE YOUNG ATHLETE: CONSIDERATIONS FOR EXERCISE, MEDICINE, AND ACTIVITY**

2 credits.

Sports are a great way for children to stay physically active, but adults are changing sports in ways that impact children in negative ways. Focuses on how kids are different than adults in terms of their needs for exercise and physical activity. Topics include physical activity epidemiology, growth, maturation, and sport specialization. Additional focus on common orthopedic injuries in the adolescent and pediatric populations and how injuries in young athletes are treated.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 390 – PRINCIPLES OF EXERCISE LEADERSHIP**

2 credits.

Introduction to the design of individual and group exercise programs utilized in fitness leadership roles. Supervised practical experience will be provided in class to assist the development of student leadership skills.

**Requisites:** Declared in Kinesiology**Repeatable for Credit:** No**Last Taught:** Spring 2023

**KINES 399 – INDEPENDENT STUDY**

1-3 credits.

Independent undergraduate study in beginning to intermediate area of study under direct guidance of kinesiology faculty.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**KINES 400 – ORGANIZATION AND ADMINISTRATION OF ATHLETIC TRAINING PROGRAMS**

3 credits.

Principles of organizational theory and administrative practice as they apply to athletic training and sports medicine programs. Emphasis on developing knowledge and skills needed for entry-level professionals in the athletic training field.

**Requisites:** Declared in Athletic Training

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**KINES 412 – ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION**

2 credits.

The presentation of materials and depth study of the organization and administration of a sound program of physical education, the knowledge of which is mandatory for all physical education teachers.

**Requisites:** Declared in Kinesiology or Physical Education

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**KINES 417 – ADVANCED CLINICAL ASSESSMENT TECHNIQUES IN ATHLETIC TRAINING**

2 credits.

Provides students with knowledge and skills in advanced clinical assessment techniques used in the evaluation of injuries, illnesses, and conditions found in physically active populations.

**Requisites:** KINES 317

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**KINES 427 – FITNESS TESTING AND EXERCISE PRESCRIPTION**

3 credits.

Fitness assessment and exercise prescription principles are applied to the health-related fitness components through discussion and lab activities.

**Requisites:** ANAT&PHY 335

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 450 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING**

3 credits.

A clinical field placement for students in the athletic training professional preparation program. Clinical placements under the direction of an AT Program Clinical Preceptor are offered in a variety of clinical settings including intercollegiate, secondary school, and private clinical settings.

**Requisites:** Declared in Athletic Training

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**KINES 457 – MEDICAL PROBLEMS OF EXERCISE AND SPORTS**

3 credits.

Responses of the human body to exercise and sports with specific discussion of acute and chronic medical problems which may affect performance. Emphasis on cardiopulmonary, metabolic, nutritional, fluid-electrolyte, heat-temperature regulation.

**Requisites:** Declared in Athletic Training

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**KINES 475 – SEMINAR IN ATHLETIC TRAINING**

1 credit.

Research trends, evidence-based clinical practice, transition to practice, and current issues in the field of athletic training are emphasized.

**Requisites:** Declared in Athletic Training

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2021

**KINES/CURRIC 478 – ELEMENTARY SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in elementary school setting.

**Requisites:** None

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES/CURRIC 479 – MIDDLE SCHOOL OR HIGH SCHOOL PHYSICAL EDUCATION STUDENT TEACHING**

2-8 credits.

Student teaching placement in secondary school setting.

**Requisites:** None

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **KINES 487 – ATHLETIC HEALTHCARE: CONTEMPORARY PERSPECTIVES**

3 credits.

Discussion of contemporary issues in Athletic Healthcare including acute and chronic medical issues that may affect athletic performance.

**Requisites:** KINES 127

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES 501 – THEORY-BASED HEALTH EDUCATION AND HEALTH PROMOTION PROGRAMS**

3 credits.

Provides an overview of the behavioral, social and cultural factors related to individual and population health and health disparities. Social and behavioral science theories and strategies in health promotion/education will be discussed in relation to preventing disease and promoting health. Provides current knowledge and analysis of issues influencing people's health and well-being from a social and behavioral science perspective. Theoretical frameworks that draw on major health behavior theories provide a better understanding of how individuals, families, peers, schools, neighborhoods, and the larger community influence risk and protective factors. Ethical considerations intrinsic to social and behavioral science efforts designed to produce health-related behavior change will be discussed. Promotes intellectual and collaborative learning through course lectures, readings, class discussions, and individual and group work.

**Requisites:** Junior standing and declared in Kinesiology, Health Promotion Health Equity, or Physical Education program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES 508 – WORKSHOP IN KINESIOLOGY**

1-3 credits.

Designed to explore topics in kinesiology and/or occupational therapy. Topics may change each semester.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **KINES 516 – PHYSICAL ACTIVITY FOR DIVERSE ABILITIES**

3 credits.

Develop knowledge of diverse populations and the ability to promote physical activity and well-being for a lifetime. Apply knowledge of barriers and the use of inclusive techniques to develop meaningful experiences and programs.

**Requisites:** Declared in Kinesiology or Promoting Activities for Diverse Abilities certificate

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES 521 – PHYSICAL ACTIVITY AND HEALTH**

3 credits.

Research evidence regarding how physical activity and fitness are related to health (e.g., during pregnancy and aging) and disease, especially cardiovascular diseases, obesity, diabetes, osteoporosis, and cancer. Application and communication of knowledge in practical situations.

**Requisites:** Declared in Kinesiology and KINES 314

**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES/NURSING 523 – CLINICAL EXERCISE TESTING & TRAINING**

3 credits.

Physiological basis and methods of human exercise testing and training. Topics: clinical exercise physiology, exercise testing protocols, cardiopulmonary monitoring, basic ECG interpretation, exercise prescription.

**Requisites:** Declared in Kinesiology and KINES 314

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES/NUTR SCI 525 – NUTRITION IN PHYSICAL ACTIVITY AND HEALTH**

3 credits.

Provides both scientific knowledge and application of nutrition related to exercise, health, and sports.

**Requisites:** ANAT&PHY 335

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES 527 – PRINCIPLES OF STRENGTH AND CONDITIONING**

3 credits.

Present/discuss the scientific basis and current practices of strength and conditioning for athletic performance. Training program design and training methods, for performance enhancement, related to the areas of strength, power, speed, and endurance.

**Requisites:** KINES 427

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **KINES 528 – SEMINAR IN STRENGTH AND CONDITIONING**

1 credit.

Provides scientific knowledge and opportunity to practice the application of strength and conditioning practices.

**Requisites:** KINES 527 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**KINES 531 – NEURAL CONTROL OF MOVEMENT**

3 credits.

Intermediate course on neuronal circuits and neurophysiological mechanisms involved in the control of human motor behavior. Including discussion of: 1) sensorimotor integration, 2) interactions between spinal, brainstem, and cerebral cortical levels of control, and 3) how motor control knowledge is created and evaluated.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 540 – DIVERSITY IN HEALTH AND PHYSICAL ACTIVITY SETTINGS**

3 credits.

Issues related to promoting equal learning opportunities in the classroom and other community settings, including effective approaches to encouraging collaboration among colleagues, staff, parents, and students who are culturally, ethnically and socio-economically diverse are examined. In addition, effective instructional and coaching methods for an inclusive sport environment, athletic programs, and health professions as they relate to diverse individuals are addressed. Theoretical and practical paradigm of cultural differences are introduced. The focus is on diversity issues as they relate to race, ethnicity, gender, social class, sexuality, and racial considerations, development and ability differences, variations in learning styles and a variety of physical, mental, and emotional disabilities.

**Requisites:** Junior standing**Course Designation:** Gen Ed – Communication Part B

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2021**KINES 547 – SKILLS FOR HEALTH: METHODS AND PRACTICUM OF TEACHING HEALTH**

3 credits.

Centered on the components (social, emotional, spiritual, environmental, occupational, intellectual, and physical) and skills (influence analysis, interpersonal communication, health-enhancing behaviors, accessing valid information, goal-setting, decision-making and advocacy) of wellness. Gain competence by planning for, learning, and practicing teaching skills in educational settings. Through this approach, highly competent teachers will be developed who can adapt health instruction to a wide variety of audiences and topics.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 555 – SPORTS SCIENCE & ATHLETE MONITORING**

3 credits.

In-depth look at how technology is changing the way we assess physical activity, help people return from injury, and increase physical performance. Topics include field-based testing, athlete monitoring, and movement screenings. Exposure to the most popular technologies in the field of human performance. Upper level elective in Kinesiology that builds on concepts acquired in the Kinesiology core curriculum. Offers real-world application of these concepts to students.

**Requisites:** None**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 566 – PROMOTING HEALTH IN THE COMMUNITY**

3 credits.

Introduces theories and application of health promotion and health education, specifically, health education specialties and philosophical foundations. Addresses professional issues relating to the history, philosophy, ethics, practice, settings and competence of health education. Includes a focus on skills and techniques in writing, developing health educational materials, public speaking and group dynamics as they relate to community health promotion and health education programs.

**Requisites:** KINES 370**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 568 – STUDENT TEACHING IN HEALTH EDUCATION**

2 credits.

Provides the opportunity for the student teacher to put theory into practice under the guidance of a licensed teacher and a university supervisor, allowing the gradual induction into the role of a professional teacher. Feedback and assessment are given in terms of growth in the understandings and abilities needed to assume the responsibilities of a beginning teacher. Emphasis is placed on helping the student teacher become a reflective professional. Cooperation among the classroom teacher, university supervisor, and administrators is encouraged.

**Requisites:** KINES 547**Course Designation:** Workplace – Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 570 – ANATOMICAL FOUNDATIONS IN ATHLETIC TRAINING**

3 credits.

Structure, regions and function of the neurological and musculoskeletal systems are presented with the purpose of providing insight into the anatomical foundations of common injuries and conditions.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022

### **KINES 571 – EMERGENCY PROCEDURES FOR ATHLETIC TRAINERS**

2 credits.

Provides future athletic training professionals with knowledge and skills to respond to emergency situations common to the athletic training environment. Emphasis on hands-on applications and interprofessional relationships with other emergency care providers and agencies.

**Requisites:** Declared Athletic Training MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **KINES 572 – FOUNDATIONAL SKILLS IN ATHLETIC TRAINING**

1 credit.

Introduces foundational skills used by athletic training professionals in the evaluation and prevention of injuries and conditions common to active populations.

**Requisites:** Declared Athletic Training MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **KINES 600 – ADVANCED EXERCISE PSYCHOLOGY**

3 credits.

Exercise and performance examined from the standpoint of motivation, personality dynamics, psychophysics, mental health, social psychology, and behavioral medicine.

**Requisites:** Graduate/professional standing or declared in Kinesiology

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **KINES 614 – BIOLOGICAL FACTORS INFLUENCING EXERCISE PERFORMANCE**

3 credits.

Exploration of selected factors relative to performance and exercise physiology : e.g., ergogenic aids, nutritional factors, gender and age of the athlete, and long term competitive events.

**Requisites:** Declared in Kinesiology, Physical Education, or Athletic Training, and KINES 314 or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **KINES 615 – LABORATORY TECHNIQUES IN EXERCISE PHYSIOLOGY**

2 credits.

Laboratory procedures and skills commonly used in exercise physiology.

**Requisites:** Declared in Kinesiology, Physical Education, or Athletic Training, and KINES 314 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **KINES 618 – BIOMECHANICS**

2-3 credits.

Biomechanics of human movement and skill with emphasis on kinematics and kinetics.

**Requisites:** Declared in Kinesiology, KINES 318 and (KINES 328, 337 or ANAT&PHY 337) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **KINES 620 – CLINICAL PRACTICUM IN ATHLETIC TRAINING I**

2 credits.

Clinical practicum that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Provides an opportunity for exposure will be to a large volume and variety of clinical experiences to facilitate learning in authentic clinical settings.

**Requisites:** Declared Athletic Training MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **KINES 621 – CLINICAL PRACTICUM IN ATHLETIC TRAINING II**

3 credits.

Clinical practicum that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of clinical experiences to facilitate learning in authentic clinical settings.

**Requisites:** KINES 620

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **KINES 622 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING I**

3 credits.

Provides a clinical field experience allowing for practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of athletic training clinical experiences to facilitate learning in authentic clinical settings. Increased patient interactions concurrent with skill acquisition and Athletic Training program progression.

**Requisites:** KINES 621

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**KINES 623 – CLINICAL FIELD EXPERIENCE IN ATHLETIC TRAINING II**

3 credits.

Clinical field experience that provides practical and skills-oriented instruction under the supervision of a skilled clinical preceptor. Exposure to a large volume and variety of clinical experiences, learning in authentic clinical settings in an office based/clinic based general medicine setting. Increased patient encounters concurrent with skill acquisition and Athletic Training program progression.

**Requisites:** KINES 622**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**KINES 624 – ATHLETIC TRAINING PRECEPTORSHIP I**

6 credits.

Provides extensive patient encounters and advanced skills-oriented instruction under the supervision of a skilled clinical preceptor, working towards independent athletic training practice. Immersive experience provides exposure to a large volume and variety of patient encounters in authentic clinical settings. Provides extensive opportunities for supervised autonomy to develop clinical decision-making skills progressing toward independent clinical-decision making.

**Requisites:** KINES 623**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 625 – ATHLETIC TRAINING PRECEPTORSHIP II**

7 credits.

Provides extensive patient encounters and advanced skills-oriented instruction under the supervision of a skilled clinical preceptor, working towards independent athletic training practice. Final immersive clinical experience will provide exposure to a large volume and variety of patient encounters in authentic clinical settings. Provides extensive opportunities for supervised autonomy moving to independent clinical decision-making.

**Requisites:** KINES 624**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 650 – FOUNDATIONS OF PROFESSIONAL PRACTICE IN ATHLETIC TRAINING**

1 credit.

Addresses foundational concepts and skills required for contemporary athletic training practice including: an introduction to evidence-based practice, disablement models and patient reported outcomes, team approach to healthcare, legal and ethical considerations, primacy of the patient, effective communication, concepts of professionalism and cultural competence.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023**KINES 651 – PUBLIC HEALTH, POLICY, AND PRACTICE**

3 credits.

Addresses the intersection of athletic training and public health by exploring population-based approaches to injury prevention and challenges students to explore how population-level problems impact individual health. Introduces and explores specific policies (e.g. concussion, athletic pre-participation, catastrophic injury) that impact the provision of effective patient-centered care and introduces skills required for management of these conditions.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 652 – EVALUATION AND THERAPEUTIC INTERVENTIONS I**

4 credits.

Provides evaluation techniques, theory and practice in the use of therapeutic exercise for the rehabilitation of athletic injuries. Provides the appropriate knowledge and skills needed to evaluate and apply therapeutic strategies in the treatment of athletic injuries. Focuses on lower extremity and closed head injuries.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 653 – EVALUATION AND THERAPEUTIC INTERVENTIONS II**

4 credits.

Provides Athletic Trainers with the knowledge, physical exam skills, and therapeutic interventions to diagnose and address common injuries and conditions. Scientific rationale for appropriate exercise design, implementation, and progression of care are emphasized.

**Requisites:** KINES 652**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 654 – CLINICAL MEDICINE IN ATHLETIC TRAINING I**

3 credits.

Examines acute and chronic medical problems encountered by athletic trainers. Includes examination and clinical skills, interventions, and requirements for referral as part of collaborative care. Emphasis on cardiopulmonary, respiratory, gastrointestinal, genitourinary, gynecological, neurological, and systemic issues.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**KINES 655 – CLINICAL MEDICINE IN ATHLETIC TRAINING II**

3 credits.

Examines acute and chronic medical problems encountered by athletic trainers. Includes examination and clinical skills, interventions, and requirements for referral as part of collaborative care. Emphasis on drug testing, illicit drug use, mental and behavioral health, sexual health, dermatology, wound care and closure, diabetes, and infectious disease.

**Requisites:** KINES 654**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 656 – SCIENTIFIC INQUIRY IN ATHLETIC TRAINING**

3 credits.

Addresses the role of evidence in supporting Athletic Training practice. Presents the concepts, methods, and strategies related to evidence-based practice and the development of critical reading and scientific writing skills.

**Requisites:** KINES 650**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 657 – ROLE TRANSITION AND PROFESSIONAL PRACTICE IN ATHLETIC TRAINING**

1 credit.

Addresses role transition and professional practice issues facing athletic trainers. Emphasis on identifying gaps in skills and expertise, recognizing communication needs, and role socialization skills for future development during final preceptorship placements and entrance into the healthcare workforce. Board of Certification preparation strategies are explored.

**Requisites:** KINES 623**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 658 – SEMINAR IN ATHLETIC TRAINING**

1 credit.

Provides a forum for athletic training students, faculty and staff to present and discuss research and current issues related to the field of athletic training.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**KINES 670 – ENHANCING PERFORMANCE AND WELLNESS**

1 credit.

Explores concepts related to promoting and implementing specialized programs focused on addressing health and performance in patients. Topics include strength and conditioning, nutrition, and wellness.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 671 – DIAGNOSTIC IMAGING IN ATHLETIC TRAINING**

1 credit.

Addresses diagnostic imaging tools used in sports medicine and orthopedics, interpretation of results, and implementation into clinical practice as part of a comprehensive evaluation.

**Requisites:** KINES 652**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 672 – PRINCIPLES OF PHARMACOLOGY FOR ATHLETIC TRAINERS**

1 credit.

Pharmacological and toxicological actions and therapeutic use of medications commonly encountered in the practice of athletic training. Includes categories of drugs, use, effects and precautions for common drugs and drug-interactions. Implications for physical activity and legal issues are examined.

**Requisites:** KINES 654**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**KINES 673 – HEALTHCARE INFORMATICS AND QUALITY IMPROVEMENT IN ATHLETIC TRAINING**

1 credit.

Explores the principles of health informatics and quality improvement for applications in contemporary athletic training practice. Content includes ethical use of data, technology, healthcare information management, fundamentals of quality improvement, measuring improvement, cost and value models, and the history of quality improvement in healthcare.

**Requisites:** Declared Athletic Training MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**KINES 674 – PRACTICE BASED RESEARCH IN ATHLETIC TRAINING**

1 credit.

Develops understanding of practice-based athletic training research. Designed as a companion to an immersive clinical experience that allows examination of the elements of a practice-based research network. Emphasis on understanding how patient care is improved through the ongoing use of injury surveillance, clinical outcomes, comparative treatment effectiveness, and fiscal analyses.

**Requisites:** KINES 656**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 690 – INTERNSHIP IN KINESIOLOGY**

3-6 credits.

Integrated learning from didactic courses in an approved supervisor setting such as a research laboratory or a health and fitness facility. Students will assume responsibilities that are consistent with their level of professional development and learning experiences.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 4 number of completions**Last Taught:** Spring 2023**KINES 699 – INDEPENDENT STUDY**

1-3 credits.

Independent undergraduate work in advanced area of study under direct guidance of kinesiology faculty.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**KINES 700 – PSYCHOLOGICAL EFFECTS OF EXERCISE**

3 credits.

Consequences of involvement in acute and chronic exercise on selected psychological states such as anxiety, depression, hostility, and self-esteem.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**KINES 713 – NEURAL BASIS OF NORMAL AND PATHOLOGICAL MOVEMENT**

3 credits.

In-depth look at anatomic, neurophysiological, behavioral, and clinical aspects of motor control under normal and pathological conditions. Movement disorders include sensory neuropathy, cerebral cortical or brain stem stroke, basal ganglia dysfunction, and cerebellar disease.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 721 – NEURAL BASIS FOR MOVEMENT**

3 credits.

How the central nervous system organizes skilled human performance. Evolution of neuromuscular mechanisms, subserving skills, and the causes and limitations of movement at high speeds and high levels of force.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**KINES 773 – CARDIORESPIRATORY ADAPTIONS TO ENVIRONMENT AND EXERCISE**

3 credits.

Examination of the effects of acute and chronic exercise and exposure to hypo- and hyperbaric environments on physiological responses; mechanisms underlying these responses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**KINES 774 – METABOLIC RESPONSES TO EXERCISE AND ENVIRONMENTAL STRESS**

2 credits.

Examination of the metabolic and biochemical responses to acute and chronic exercise and environmental stress. Emphasis placed on the mechanisms underlying these responses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**KINES 779 – HUMAN MUSCLE FUNCTION IN HEALTH AND DISEASE**

2 credits.

Multidisciplinary seminar on human muscle function in health and disease. The course is geared toward advanced undergraduate and graduate students in kinesiology, physical and occupational therapy, motor control and behavior, neurophysiology resident in neurology and other related allied health professionals.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**KINES 785 – HUMAN OCCUPATION AND HEALTH**

2-3 credits.

Focuses on the nature of human occupation (everyday purposeful activity) and its relationship to well-being and health. Theories of occupation and health are critically examined.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**KINES/POP HLTH 791 – PHYSICAL ACTIVITY EPIDEMIOLOGY**

3 credits.

Recommendations for and surveillance of physical activity in the U.S., and associations with health and disease at the population level. Emphasis on measurement techniques, study design and research considerations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**KINES 800 – SEMINAR-EXERCISE PSYCHOLOGY**

2 credits.

Research oriented developments in exercise psychology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**KINES 861 – PRINCIPLES OF MOTOR CONTROL AND LEARNING**

3 credits.

Theories and experimental findings in motor control, acquisition and retention of motor behavior. Topics: attention, models of motor control, kinesthesia, learning, information processing, memory, transfer, feedback, age and gender differences.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**KINES 885 – SEMINAR IN OCCUPATION AND HEALTH**

1 credit.

Current theoretical and methodological issues and problems within the study of human occupation and health.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**KINES 900 – SEMINAR IN KINESIOLOGY**

1 credit.

Provides a forum for students, faculty and staff from the department of kinesiology to present and discuss research and current issues related to the field of kinesiology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**KINES 951 – SEMINAR-BIOMECHANICS**

2 credits.

Seminar topics in field of biomechanics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**KINES 953 – HUMAN BIODYNAMICS SEMINAR**

1 credit.

Seminar topics in field of human biodynamics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**KINES/POP HLTH 955 – SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY**

1 credit.

Current research developments in physical activity epidemiology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**KINES 961 – SEMINAR IN MOTOR CONTROL AND LEARNING**

2 credits.

Seminar topics in field of motor control and learning.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**KINES 990 – RESEARCH OR THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of kinesiology faculty member.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**KINES 991 – RESEARCH IN PHYSICAL ACTIVITY- THEORY AND DESIGN**

3 credits.

Basic principles of scientific inquiry and their application to the study of physical activity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**KINES 999 – INDEPENDENT READING**

1-4 credits.

Directed study projects for graduate students as arranged with kinesiology faculty member.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## LANDSCAPE ARCHITECTURE (LAND ARC)

**LAND ARC 210 – INTRODUCTION TO LANDSCAPE ARCHITECTURE DESIGN**

4 credits.

Introduction to the techniques of landscape design, planning, and management through studio exercises. Principles of graphic communication media, and development of practical graphic skills to enhance ability to communicate with lay and professional audiences.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 211 – SHAPING THE BUILT ENVIRONMENT**

3 credits.

Urban, suburban, and rural environments intersect with the natural environment in important yet complex ways. Cultural as well as biophysical systems influence the structure and function of these environments at both local and regional scales. Exploration of these relationships by analyzing built environments and simulating future design and planning scenarios offer a transdisciplinary foundation for subsequent coursework.

**Requisites:** None

**Course Designation:** Breadth - Natural Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 250 – SURVEY OF LANDSCAPE ARCHITECTURE DESIGN**

3 credits.

Principles of landscape and environmental design; incorporates elements of landscape planning and management. Provides background to the ideas and personalities shaping landscape architecture in America.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 260 – HISTORY OF LANDSCAPE ARCHITECTURE**

3 credits.

A critical and historical analysis of our design of outdoor space.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 261 – PRINCIPLES OF LANDSCAPE ARCHITECTURE DESIGN AND GRAPHICS**

4 credits.

Basic principles in the design of landscapes to aid in developing individual capacities and approaches to designing. Principles of graphic communication media and development of practical graphic skills.

**Requisites:** Declared in Landscape Architecture BLA

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAND ARC/HORT 263 – LANDSCAPE PLANTS I**

3 credits.

Field identification, landscape characteristics, uses, environmental requirements, adaptability of woody ornamental plants; their autumn and winter character.

**Requisites:** Sophomore standing and (BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BOTANY 100)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**LAND ARC/ANTHRO/ART HIST/DS/HISTORY 264 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAND ARC 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Independent study as arranged with a faculty member for Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**LAND ARC 299 – INDEPENDENT STUDIES**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAND ARC/F&W ECOL/HORT/PL PATH 309 – DISEASES OF TREES AND SHRUBS**

3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Includes field trips

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**LAND ARC 311 – INTRODUCTION TO DESIGN FRAMEWORKS AND SPATIAL TECHNOLOGIES**

2 credits.

Geodesign considers questions and methods necessary to solve large, complicated, and significant design problems across a range of geographic scales. Introduces methods and technologies related to geodesign problems through interactive lessons, discussions, and laboratory exercises.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAND ARC 321 – ENVIRONMENT AND BEHAVIOR STUDIO - DESIGNING HEALTH PROMOTING ENVIRONMENTS**

4 credits.

Design studio with an emphasis on the application of design principles aimed at promoting people's health and wellbeing in the built environment.

**Requisites:** LAND ARC 261 and DS 221

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 353 – LANDSCAPE ARCHITECTURAL TECHNOLOGY I**

3 credits.

Problems dealing with the comprehension and modification of the earth's surface including landform design, preparation of grading plans, earthwork calculations.

**Requisites:** Declared in Landscape Architecture BLA

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 354 – LANDSCAPE ARCHITECTURAL TECHNOLOGY II**  
3 credits.

Problems dealing with construction detailing, including roadways, drainage structures, construction materials, cost estimating, specifications and working drawings.

**Requisites:** Declared in Landscape Architecture BLA

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAND ARC 360 – EARTH PARTNERSHIP RESTORATION EDUCATION: INDIGENOUS ARTS & SCIENCES**  
1 credit.

Participate in a one-week community-based, intergenerational Institute focused on ecological restoration and water stewardship rooted in Indigenous knowledge while working with Native Nations in Wisconsin. An emphasis is on environmental science aligned with cultural values and indigenous science processes and address environmental, education and health issues through restoration and stewardship action. Learn culturally accurate and authentic resources about tribal sovereignty, history, and culture and contemporary issues relevant to each community. Through hands-on stewardship action, a greater sense of self and diversity of perspectives related to impacts of climate change and preserving biodiversity will be gained.

**Requisites:** Junior standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Summer 2022

**LAND ARC/ENVIR ST 361 – WETLANDS ECOLOGY**  
3 credits.

Types, origins, settings, and structure of wetlands. Physical, biological, and cultural values, uses and assessments. Physical and biological characteristics and dynamics. Protection, management and restoration.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, ZOOLOGY 153, (BIOCORE 381 and 382), BOTANY/BIOLOGY/BOTANY 130, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 363 – EARTH PARTNERSHIP: RESTORATION EDUCATION FOR EQUITY AND RESILIENCE**  
3 credits.

Ecological restoration education utilizes the power of place to work towards social justice and sustainability. Work with Native Nations and community partners to apply Earth Partnership's 10 Step process. This process includes historical, cultural, ecological, and social justice components. Learn about assets-based, culturally relevant approaches to working with community partners. Interact with guest speakers and partners to experience firsthand different perspectives on environment, cultural priorities, protocols for interaction, and opportunities for relationship building. Work on community-based stewardship projects and reflect upon your epistemological relationship to land and people as global citizens.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Fall 2022

**LAND ARC 366 – INTRODUCTION TO ARCHITECTURAL AND ENVIRONMENTAL DESIGN**  
3 credits.

Introduces beginning design students to the interdisciplinary processes used in solving three-dimensional design problems for both exterior and interior spaces. Allows students to understand the integration between architectural design, site design and interior design, and how these design realms create physical and sensory experiences in our everyday lives. Helps students develop fundamental verbal and graphic communication skills used in the professional design world. Questions explored in this course include: How to humans experience their environment? How do we perceive and interact with spaces where we live, work, and play? What makes great interior and exterior spaces? How do designers think to solve creative spatial design problems?

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**LAND ARC/ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371 – INTRODUCTION TO ENVIRONMENTAL REMOTE SENSING**  
3 credits.

Introduction to the Earth as viewed from above, focusing on use of aerial photography and satellite imagery to study the environment. Includes physical processes of electromagnetic radiation, data types and sensing capabilities, methods for interpretation, analysis and mapping, and applications.

**Requisites:** (Sophomore standing and MATH 113, 114, or 171), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **LAND ARC/ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 372 – INTERMEDIATE ENVIRONMENTAL REMOTE SENSING**

3 credits.

Examines intermediate-level concepts in information extraction, data processing and radiative transfer relevant to remote sensing of the environment. Includes transforms, image correction, classification algorithms and change detection, with emphasis on applications for land use planning and natural resource management.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

### **LAND ARC 375 – SPECIAL TOPICS**

1-4 credits.

Exploration of special issues or problems in landscape architecture. Topic and faculty vary.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **LAND ARC 380 – PLANTS FOR ECOLOGICAL DESIGN I**

2 credits.

Plants as the basis for ecological landscape design in urban and rural settings in late summer, fall, and early winter and their role in creating beautiful, resilient, and high performing outdoor spaces that enhance human health and well-being and provide a number of global ecosystem services. Study plants in their native and designed habitats to understand the relationships between and among plants and their environment. Identify the aesthetic, structural, functional, and cultural characteristics of key Wisconsin native plants and a variety of non-invasive horticultural species as well as the composition, structure, and functions of forest, wetland, and grassland communities. Express the essence and cultural meaning of plants and plant communities through hand and digital graphics and writing.

**Requisites:** LAND ARC 250, (BOTANY 100, BIOLOGY/BOTANY/ BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381 and 382), and sophomore standing, or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **LAND ARC 381 – PLANTS FOR ECOLOGICAL DESIGN II**

1 credit.

Plants as the basis for ecological landscape design in urban and rural settings. Study plants in their native and designed habitats to understand the relationships between and among plants and their environment in late winter and early spring. Identify the aesthetic, functional, and cultural characteristics of key Wisconsin native plants and plant communities as well as a variety of non-invasive horticultural species. Discuss how to use plants together in settings with environmental conditions to which they are adapted in order to create resilient and high-performing outdoor spaces that enhance human health and well-being and provide a number of global ecosystem services.

**Requisites:** LAND ARC 380 or Graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **LAND ARC 397 – INTERNSHIP IN LANDSCAPE ARCHITECTURE**

1 credit.

Integrate knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Includes applied experience and making professional connections in the field of landscape architecture. Apply landscape architecture concepts, practice problem solving-skills, explore multidisciplinary approaches, develop team-work and interpersonal skills, access and use information resources, reflect upon or address ethical and professional issues.

**Requisites:** Sophomore standing and declared in Landscape Architecture BLA

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

### **LAND ARC 400 – STUDY ABROAD IN LANDSCAPE ARCHITECTURE**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**LAND ARC 460 – ADVANCED VISUAL COMMUNICATION IN LANDSCAPE ARCHITECTURE**

3 credits.

Focuses on the symbolic and representational computer graphics that are essential elements of design communication in landscape architecture. Reviews the strengths and weaknesses of hand and digital media and the use of both when appropriate. Topics and assignments include advanced hand sketching and graphics, computer graphic techniques, digital photography, advanced digital color theory and rendering, digital image processing, CAD drafting, 2D/3D modeling, image compositing, media formats, and video.

**Requisites:** LAND ARC 261**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAND ARC/URB R PL 463 – EVOLUTION OF AMERICAN PLANNING**

3 credits.

The nature and cultural significance of contemporary methods for the systematic formulation of public policies for community, metropolitan, and state development through comprehensive planning. Historic roots, recent trends and new directions in American planning concepts, institutions and professional specializations.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAND ARC/CHICLA 475 – LATINO URBANISM: DESIGN AND ENGAGEMENT IN THE AMERICAN CITY**

3 credits.

Urban design in the 21st century American city explores a new understanding of urban placemaking and development. Explores the intersections of culture, place, and design to critically address how the socioeconomic dynamics that underlie demographic shifts in the U.S. are influencing urban change in the American landscape. Focuses on the evolution and ways by which Latinos shape the built environment, both in the public realm and in the home.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**LAND ARC 511 – GEODESIGN METHODS AND APPLICATIONS**

3 credits.

Explore and apply methods and technologies used in the geodesign framework that emphasize collaboration among the design professions, the natural and social sciences, and community stakeholders. Exercises will focus on scenarios within the built and natural environment.

**Requisites:** LAND ARC 311, CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ ENVIR ST 377, or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAND ARC 525 – SOCIAL JUSTICE AND THE URBAN LANDSCAPE**

3 credits.

Examines the cultural, social and political interactions that occur in urban landscapes including parks, plazas, streets and other public open spaces. An examination of past and present landscapes as sites of the struggle for social justice. The focus is on urban landscapes of the United States.

**Requisites:** Junior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAND ARC/ENVIR ST/GEOG/URB R PL 532 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING**

3 credits.

Explores planning-related Geographic Information System (GIS) data, applications, analytical tools, and implementation issues.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAND ARC 550 – PROFESSIONAL PRACTICE IN LANDSCAPE ARCHITECTURE**

3 credits.

Introduction to operational procedures used in professional offices ranging from private landscape architectural design firms to public agencies.

**Requisites:** Senior standing and declared in Landscape Architecture BLA**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



### **LAND ARC/CIV ENGR/ENVIR ST 556 – REMOTE SENSING DIGITAL IMAGE PROCESSING**

3 credits.

Techniques of enhancement and quantification of remote sensing imagery. Emphasis on processing and analyzing data gathered by airborne and satellite sensors. Techniques to quantitatively analyze data from photography, electro-optical scanners, satellite systems, and radar and passive microwave systems. Applications to: agriculture and forestry, geology and soils, water quality, and urban and regional planning.

**Requisites:** ENVIR ST/FW ECOL/GEOG/G L E/GEOSCI/LAND ARC/ ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **LAND ARC 560 – PLANTS AND ECOLOGY IN DESIGN**

4 credits.

Explores the process of plant selection and placement in the landscape. The desired landscape will be ecologically appropriate to the setting, sustainable, functional in response to goals, and aesthetically pleasing. Acquire an awareness and understanding of the physical characteristics of plant materials and a sensitivity to their needs based on past and present. Emphasis on the recognition of the philosophy of planting design as a dynamic and changing spatial art and science, the relationship between environment and plants, application of design composition principles to plant selection and placement, and functional and utilitarian uses of plants; i.e., the opportunities and constraints for plants in the designed landscape.

**Requisites:** Declared in Landscape Architecture BLA and LAND ARC/ HORT/LAND ARC 263

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **LAND ARC 561 – HOUSING AND URBAN DESIGN**

4 credits.

An application of landscape design principles and problem-solving methods to housing and urban issues with attention to physical site design, land-use controls, and the relationship between housing and associated land uses. The built environment is continuously changing through multiple land development-and redevelopment-decisions. Public policies on housing, transportation, mortgage financing, and taxation, in conjunction with changing demographics and lifestyle preferences, are just some of the factors that influence the evolving structure and function of the built environment. Landscape architects can play important roles-- through design, civic engagement, and policy advocacy--in making our cities and suburbs healthier and more sustainable. Studio projects focus on the central city and/or suburbs.

**Requisites:** LAND ARC 321

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **LAND ARC 562 – OPEN SPACE PLANNING AND DESIGN**

4 credits.

Form-giving design of open spaces in urban and rural settings and management for amenity and functional values. Integration of human activity requirements and experiences with physical and natural site features.

**Requisites:** LAND ARC 321 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **LAND ARC 563 – DESIGNING SUSTAINABLE AND RESILIENT REGIONS**

4 credits.

Exploration of broad scale design issues to develop synthesis and design skills. Uses spatial form and bioregional cultural, ecological and environmental concepts to solve land use and conservation problems. Regional design requires advanced techniques for inventory, analysis, and design to help in understanding complex trends, policy and design impacts, hazard mitigation, design intervention suitability, design guidelines, and systems level design. These techniques help us explore the relationships between regions and sites, especially regional implications of site design decisions and site design impacts on regional characteristics and systems.

**Requisites:** LAND ARC 562

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **LAND ARC/F&W ECOL/ZOOLOGY 565 – PRINCIPLES OF LANDSCAPE ECOLOGY**

2 credits.

Emphasizes the importance of spatial patterns at broad scales. Concepts and applications are covered.

**Requisites:** (BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460 or F&W ECOL 550) and (STAT 301, 371, or STAT/FW ECOL/HORT/ F&W ECOL/STAT 571), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**LAND ARC/ENVIR ST 581 – PRESCRIBED FIRE: ECOLOGY AND IMPLEMENTATION**

3 credits.

Covers the use of live fire in land management and provides a background in fire ecology, fire behavior, fire effects, and the prediction of fire behavior for wetland, prairie and savanna fuels. Instruction includes field training with live fire exercises and the use of fire management equipment. Participate in prescribed burns outside of scheduled class times. Confers certificates of completion that qualify an individual to participate on prescribed fire crews with public and private sector organizations.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAND ARC 590 – SPECIAL TOPICS**

1-4 credits.

Exploration of special issues or problems in landscape architecture.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**LAND ARC 610 – LANDSCAPE ARCHITECTURE SEMINAR**

3 credits.

Capstone project proposal development from a regional to site scale. Includes site visits with clients to gain a better understanding of local conditions and the client's expectations. The final proposal document is grounded in research and includes a literature review, precedent studies, programmatic development, and inventory and analysis mappings that address issues from ecology to public/private partnerships.

**Requisites:** Declared in Landscape Architecture BLA**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LAND ARC 611 – SENIOR CAPSTONE IN LANDSCAPE ARCHITECTURE**

4 credits.

Problems in landscape design, planning and management. Provides an opportunity for synthesis of the knowledge, skills, and approaches learned in previous course work.

**Requisites:** LAND ARC 610**Course Designation:** Gen Ed - Communication Part B

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAND ARC 621 – DESIGNING HEALTHY COMMUNITIES SEMINAR**

3 credits.

Sustainable community planning and design principles aimed at promoting human health and wellbeing as it relates to the quality of the physical environment. Special topics include access to settings that promote physical activity, social interaction and mental restoration; walk- and bikeability; access healthy food, complete streets, place-making, and biophilic design, active living assessment tools, and architectural sustainability certification systems focusing on the health benefits of good community design.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**LAND ARC 633 – GEOSPATIAL APPROACHES TO CONSERVATION AND ADAPTATION**

2 credits.

Explore and use applications of Geographical Information Systems (GIS), particularly related to landscape ecology, environmental analysis, and conservation design. Learn/practice how to solve spatial environmental questions and proficiently apply design thinking toward landscape conservation and adaptation solutions.

**Requisites:** LAND ARC 311 and 511**Repeatable for Credit:** No**LAND ARC 634 – GEODESIGN CAPSTONE PROJECT**

3 credits.

Apply integrated skills and knowledge from previous requisite courses to resolve a "real world" geodesign problem. Work with advisor on individual project.

**Requisites:** LAND ARC 633 and 671**Repeatable for Credit:** No**LAND ARC/DS 639 – CULTURE AND BUILT ENVIRONMENT**

3 credits.

The course explores cultural values embedded in buildings through understanding physical configurations, social organizations, practiced/ symbolic/representational aspects of buildings. The course covers a wide range of cultures and the built environments they produce including examples from the Americas, the Middle East, as well as those of the many ethnic minorities in the U.S.

**Requisites:** Junior standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LAND ARC 651 – PLANT COMMUNITY RESTORATION AND MANAGEMENT WORKSHOP**

4 credits.

Formulation of plant community restoration and management plans; including the preparation of planting plans and working drawings for implementation. Classroom and practical exposure to natural areas management tools, including prescription prairie fire.

**Requisites:** LAND ARC 211**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**LAND ARC 668 – RESTORATION ECOLOGY**

3 credits.

Restoration is an approach to the conservation of native species, plant communities, and ecosystems. It is an interdisciplinary global enterprise practiced by private and public sector professionals and dedicated volunteers of all ages. Covers both the theory and practice of restoration ecology and examine the current opportunities, challenges, and controversies that underlie the field. The goal may be to preserve nature, but restoration is a fundamentally human enterprise—it is accomplished for and by people. Therefore we cover information from ecology, sociology, and the humanities.

**Requisites:** BIOCORE 381, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, ZOOLOGY/BIOLOGY 102, BOTANY/BIOLOGY/BOTANY 130, or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAND ARC/BOTANY 670 – ADAPTIVE RESTORATION LAB**

2 credits.

Field experience in restoration as an adaptive process involving field experimentation; baseline data collection on restoration sites; design of experiments to advance restoration science; quantitative evaluation of restoration outcomes. Includes analysis and interpretation of data.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**LAND ARC 671 – GEODESIGN FOR SUSTAINABILITY AND RESILIENCY**

3 credits.

Explores the Geodesign concepts and analysis methods that support sustainability and resiliency. A brief history and development of the sustainability and resiliency movements establishes context, motivation and priorities for Geodesign. Characteristics of public participation frame the role of geodesign to engage and empower the community to plan for sustainability and resiliency. Discovery of issues, spatial data and analyses follows a conceptual and geographical trend from local to global scales and urban to rural localities. These include population density, land cover change, urban growth/sprawl, transportation, walkable neighborhoods, water resources, green infrastructure, landscape prioritization, carbon footprint analysis, and climate change. Geodesign approaches include measurement of indicators/metrics, resource management, cost/benefit analyses, and proximity measurements.

**Requisites:** LAND ARC 311 and 511**Repeatable for Credit:** No**LAND ARC 677 – CULTURAL RESOURCE PRESERVATION AND LANDSCAPE HISTORY**

3 credits.

Provides an introduction to cultural landscape studies as a corollary to cultural conservation in public folklore, environmental planning, natural and cultural resource management, landscape architecture, and the history of landscape architecture. Includes varied concepts of cultural landscape, key historical and cultural landscape research methodologies, and a range of preservation and conservation types involving cultural landscapes, traditional cultural properties, and intangible and tangible cultural heritage. Observe, research, and write about cultural landscapes, gain an understanding of cultural, historical, and natural dynamics of the (built) environment, and become acquainted with aspects of cultural conservation and landscape preservation nationally and internationally.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAND ARC 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2021**LAND ARC 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2022

**LAND ARC 691 – SENIOR THESIS**

4 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2001

**LAND ARC 692 – SENIOR THESIS**

4 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 1996

**LAND ARC/ENVIR ST/SOIL SCI 695 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN NATURAL RESOURCES**

3 credits.

Course has four components: 1) Detailed review of GIS concepts; 2) Case studies; 3) GIS implementation methods; 4) Laboratory to provide "hands-on" GIS experience.

**Requisites:** LAND ARC 211 or GEOG/CIV ENGR/ENVIR ST/CIV ENGR/ GEOG 377 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 699 – SPECIAL PROBLEMS-LANDSCAPE ARCHITECTURE**

1-5 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAND ARC 710 – THEORIES OF LANDSCAPE CHANGE**

2 credits.

Theories of landscape change in the arts and sciences. Contributions of the scientific method and humanistic frameworks to major issues in landscape architecture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**LAND ARC 720 – CRITICAL INQUIRY INTO LANDSCAPE DESIGN EXPRESSION**

2 credits.

Normative design theory as it relates to historical and contemporary aesthetic expression in landscape design. Review of critical theory and meaning associated with a broad landscape architecture typology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**LAND ARC 740 – RESEARCH IN LANDSCAPE ARCHITECTURE**

3 credits.

Overview of research: Logic and language of the process, substantive issues, criticism of research literature, developments of detailed proposals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LAND ARC/ANTHRO/ART HIST/DS/HISTORY 764 – DIMENSIONS OF MATERIAL CULTURE**

4 credits.

This course introduces students to the interdisciplinary field of material culture studies. It is intended for students interested in any professional endeavor related to material culture, including careers in museums, galleries, historical societies, historic preservation organizations, and academic institutions. During the semester, students have varied opportunities to engage with and contemplate the material world to which people give meaning and which, in turn, influences their lives. Sessions combine in some way the following: presentations from faculty members and professionals who lecture on a phase of material culture related to his/her own scholarship or other professional work; discussion of foundational readings in the field; visits to collections and sites on campus and around Madison; discussion of readings assigned by visiting presenters or the professors; and exams and short papers that engage material culture topics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAND ARC 866 – SEMINAR IN NATURAL PLANT COMMUNITY RESTORATION AND MANAGEMENT**

1 credit.

Presentations on topics related to plant community management and restoration.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LAND ARC 940 – GRADUATE SEMINAR**

1-2 credits.

Individual research, group discussion and workshop covering selected problems relating to the environment and landscape architecture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAND ARC 990 – RESEARCH**

1-12 credits.

Individual mentored research and study for completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAND ARC 999 – INDEPENDENT STUDIES**

1-3 credits.

Opportunity to explore concepts or issues of interest.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LATIN (CLASSICS) (LATIN)****LATIN 103 – FIRST SEMESTER LATIN**

4 credits.

Forms and syntax, with simple translation.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LATIN 104 – SECOND SEMESTER LATIN**

4 credits.

Forms and syntax, with translation of easy prose.

**Requisites:** LATIN 103

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LATIN 302 – LATIN LITERATURE OF THE ROMAN EMPIRE**

3 credits.

Writers of the Augustan period and the Empire studied in a historical and cultural context.

**Requisites:** LATIN 301

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LATIN 305 – THIRD SEMESTER LATIN**

4 credits.

Brief review of Latin grammar and vocabulary. Extensive reading from several authors.

**Requisites:** LATIN 104, 391, or graduate/professional standing

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LATIN 306 – FOURTH SEMESTER LATIN**

4 credits.

Close literary analysis of the structure, style, and language of several Roman poets and prose writers. A critical rather than a purely historical approach to these authors.

**Requisites:** LATIN 305 or graduate/professional standing

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LATIN 391 – ELEMENTARY INTENSIVE LATIN**

4 credits.

An intensive introduction to the grammar and vocabulary of Classical Latin, the language of ancient Rome. Complete the equivalent of LATIN 103 104 in a single semester. Gain skills in preparation for reading Latin authors in the original. While focus is primarily on written grammar and translation, also touches on aspects of Roman culture, history and literature.

**Requisites:** Not open to students with credit for LATIN 103 or 104

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LATIN 392 – LATIN FOR GRADUATE READING KNOWLEDGE II**

3 credits.

Focus on reading and translation of prominent authors in the original Latin.

**Requisites:** LATIN 104, 391, or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**LATIN 401 – READINGS IN LATIN LITERATURE**

3 credits.

Writers of the Republic studied in a historical and cultural context.

**Requisites:** LATIN 306 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frng Lang - 5th + semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LATIN 505 – ELEMENTARY PROSE COMPOSITION**

3 credits.

Survey of Latin syntax and idioms.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LATIN 515 – VERGIL**

3 credits.

Through intensive translation and discussion of Vergil's Latin, hone ability to translate, interpret, and discuss Latin poetry.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LATIN 519 – LATIN POETRY**

3 credits.

Latin poetry of the Republic and/or Empire.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LATIN 520 – ROMAN DRAMA**

3 credits.

Plautus, Terence, Seneca, fragmentary remains of Republican drama, and classical and post-classical receptions. Includes discussion of genre, performance, and sociohistorical context

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**LATIN 521 – ROMAN ELEGY**

3 credits.

One or a combination of: Catullus, Tibullus, Propertius, Ovid, later elegiac poets.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**LATIN 522 – ROMAN LYRIC POETRY**

3 credits.

Roman lyric poetry of one or a combination of the following: Horace, Statius, later lyric poets.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**LATIN 523 – ROMAN SATIRE**

3 credits.

One or a combination of: fragments of Lucilius; Horace; Persius, Juvenal; later satire poets.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019



**LATIN 524 – ROMAN NOVEL**

3 credits.

One or a combination of : Petronius, Cena Trimalchionis, Satyricon; Apuleius, Cupid and Psyche, Metamorphoses; other Roman novels.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**LATIN 539 – LATIN HISTORICAL WRITERS**

3 credits.

One of the following: (a) Cicero, Epistles, (b) Pliny, Epistles, (c) Caesar, (d) Sallust, (e) Livy, (f) post Augustan historians, (g) historians of the late Empire.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**LATIN 549 – LATIN PHILOSOPHICAL WRITERS**

3 credits.

One of the following: (a) Cicero's philosophical works, (b) Seneca, (c) Latin patristic writers.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LATIN 559 – LATIN ORATORY**

3 credits.

One of the following: (a) Cicero, Orations, (b) Roman rhetoric.

**Requisites:** LATIN 302 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**LATIN/MEDIEVAL 563 – MEDIAEVAL LATIN**

3 credits.

Introduction to chronological, geographical, and generic range of post-classical Latin, including not only the "medieval" period but the late antique, Renaissance, and beyond.

**Requisites:** LATIN 306 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**LATIN 681 – HONORS THESIS**

3 credits.

Individual mentored study for students completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2019**LATIN 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2020**LATIN 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**LATIN 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LATIN 699 – DIRECTED STUDY**

1-3 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LATIN 890 – INDIVIDUAL RESEARCH THESIS**

1-12 credits.

Mentored reading, writing, and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LATIN 910 – SEMINAR-POETRY**

3 credits.

Examine topics relevant to the ancient and modern worlds through analysis of Latin poets.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**LATIN 950 – SEMINAR-ORATORY**

3 credits.

Examine topics relevant to the ancient and modern worlds through analysis of Latin texts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**LATIN AMERICAN,  
CARIBBEAN, AND IBERIAN  
STUDIES (LACIS)****LACIS/HISTORY/INTL ST 242 – MODERN LATIN AMERICA**

3-4 credits.

A broad overview of Latin American history in the modern period, since independence but with a primary focus on the twentieth century. Particular emphasis will be placed on the socioeconomic, cultural, and political structures and processes that shaped and continue to influence life in Latin America. Key issues such as colonialism, nationalism, democracy, and revolution will be examined critically in light of broad comparative themes in Latin American and world history. Among the topics to be explored in detail will be the Mexican and Cuban revolutions, populism and dictatorship, socialism and neoliberalism, and drugs and migration.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**LACIS/HISTORY 243 – COLONIAL LATIN AMERICA: INVASION TO INDEPENDENCE**

3-4 credits.

An introductory survey of colonial Latin American history, from the late fifteenth to the early nineteenth century. Examines developments in Spanish and Portuguese America by reading both secondary and primary sources. Beginning with fifteenth-century Europe, the Americas and West Africa, discusses European expansion and invasion, first contacts between the so-called Old and the so-called New Worlds, as well as the role of religion, sexuality, gender, labor and production, trade and exchange, and politics. Each week, a central question will address the topic for that week. Become familiar with and contextualize key processes and events in colonial Latin American history and learn about the nature of colonization. Identify and evaluate historical arguments. Practice interpreting primary sources and building historical arguments about them.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LACIS/AFROAMER/ANTHRO/C&E SOC/ GEOG/HISTORY/  
POLI SCI/SOC/SPANISH 260 – LATIN AMERICA: AN  
INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LACIS/CHICLA/HISTORY/POLI SCI 268 – THE U.S. & LATIN  
AMERICA FROM THE COLONIAL ERA TO THE PRESENT: A  
CRITICAL SURVEY**

3 credits.

A critical examination of US-Latin American relations from the colonial era to the present, tracing the emergence and evolution of the United States as a hemispheric and global power and its political and economic impact on Latin America. Primary attention will be focused on US relations with Mexico, Central America and the Caribbean, but other Latin American countries will figure prominently during certain episodes.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**LACIS/SPANISH 285 – RACE AND CULTURE IN THE AMERICAS**

3 credits.

Examine how the experiences of marginalized groups in the U.S. are profoundly intertwined with hemispheric historical processes. Review the categories that emerged to conceptualize human difference as European colonizers dispossessed indigenous peoples of their lands and inaugurated the forced migration and enslavement of peoples from Africa. Focus on how race was transformed after the revolutions of independence, exploring key concepts such as the one drop rule, mestizaje, racial democracy, and color-blindness. Explore how race intersects with gender, class, and migration, as well as with slavery, anti-colonial struggles, and US expansionism. Examine common assumptions in comparisons of race relations -e.g., the idea of a more "fluid" understanding of race in Latin American countries, versus the binary models of the U.S.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**LACIS/CHICLA/HISTORY/POLI SCI 355 – LABOR IN THE  
AMERICAS: US & MEXICO IN COMPARATIVE & HISTORICAL  
PERSPECTIVE**

3 credits.

Provides a critical examination of the history of labor and working people in the Americas, from the colonial era to the present. It focuses on the experience of the United States and Mexico, offering a comparative perspective on their distinct but also shared (and increasingly linked) histories. The seminar proceeds chronologically, highlighting major episodes in the evolution of labor systems in the two countries, beginning with the colonial labor systems implemented by the Spanish and British empires following the European conquest of the Western Hemisphere. Among other topics, we will examine the pivotal role of slavery and other forms of forced labor, the impact of the industrial revolution, the emergence and expansion of corporate capitalism and the labor unrest it provoked in the post-civil war U.S., the role of labor in the Mexican Revolution and its aftermath, the impact of the Great Depression and labor incorporation on the post-WWII social and political order of both countries, the breakdown of that order and the move to neo-liberalism in the 1970s and 1980s, and the emergence of an increasingly integrated North American production system and its consequences for labor and working people on both sides of the US-Mexico border.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**LACIS/ANTHRO 361 – ELEMENTARY QUECHUA**

4 credits.

Phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LACIS/ANTHRO 362 – ELEMENTARY QUECHUA**

4 credits.

Continued introduction to phonology and morphology; concentration on the acquisition of conversational skills; reading of texts of graded difficulty.

**Requisites:** ANTHRO/LACIS/ANTHRO 361

**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LACIS/ANTHRO 363 – INTERMEDIATE QUECHUA**

4 credits.

Advanced morphology and syntax; advanced conversation and composition; cultural background of Quechua speaking peoples through reading of myths, legends and folktales.

**Requisites:** ANTHRO/LACIS/ANTHRO 362

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LACIS/ANTHRO 364 – ADVANCED QUECHUA**

4 credits.

Continuation of advanced conversation and composition; cultural background of Quechua-speaking peoples through reading of myths, legends, folktales; problems in dialectology.

**Requisites:** ANTHRO/LACIS/ANTHRO 363

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LACIS/ILS 367 – MIGRATION AND THE MIGRANT EXPERIENCE IN THE AMERICAS**

3 credits.

Explores how the understanding of migration to the Americas has been shaped over time and across cultures. Engaging art and literature, and employing historical and psychoanalytic approaches, the course critically analyzes the migrant experiences. Topics include: the relationships between literature, art, and migration; the role of migrants in constructing America; and the role of art and literature in the empowerment of marginalized groups.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**LACIS/ANTHRO 376 – FIRST SEMESTER YUCATEC MAYA**

4 credits.

Introduction to Yucatec Maya language. Focus on acquiring vocabulary and grammar for basic conversational proficiency. Taught through in-class oral and aural exercises, language tapes, and primary texts. Learn about Maya culture, history, folklore, and language politics.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LACIS/ANTHRO 377 – SECOND SEMESTER YUCATEC MAYA**

4 credits.

Continued introduction to Yucatec Maya language. Focus on acquiring vocabulary and grammar for basic conversational proficiency. Taught through in-class oral and aural exercises, language tapes, and primary texts. Learn about Maya culture, history, folklore, and language politics.

**Requisites:** ANTHRO/LACIS/ANTHRO 376

**Course Designation:** Breadth - Humanities

Frgn Lang - 2nd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LACIS 440 – TOPICS IN LATIN AMERICAN, CARIBBEAN, AND IBERIAN STUDIES**

1-4 credits.

An examination of specific topics related to the Latin American, Caribbean, and Iberian region. Topics vary each semester, but may include specific themes in history, literature, media, political science, sociology, culture, politics, social work, and agriculture.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LACIS 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**LACIS 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2011

**LACIS 698 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**LACIS 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LACIS/A A E/ANTHRO/C&E SOC/GEOG/HISTORY/POLI SCI/  
PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR  
IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

## LAW (LAW)

**LAW/ACCT I S 329 – TAXATION: CONCEPTS FOR BUSINESS AND  
PERSONAL PLANNING**

3 credits.

An introduction to the U.S. income taxation concepts with emphasis on business and personal planning strategies. Taxes are placed in a framework which considers all costs of doing business. Includes approaches and skills needed to prepare individual, corporate, and partnership income tax returns.

**Requisites:** ACCT I S 100, 300, or LAW 811. Not open to students declared in Business: Accounting BBA program**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 601 – INTRODUCTION TO AMERICAN LAW**

3 credits.

An introduction to the American common law tradition and to the American legal system.

**Requisites:** Declared in Legal Institutions**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 602 – LEGAL SOURCES**

3 credits.

Overview of the institutions and entities that create legal documents in the U.S.; how these documents are organized and found in a law library; introduction to common law case analysis.

**Requisites:** Declared in Legal Institutions**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW/LEGAL ST/SOC 641 – SOCIOLOGY OF LAW**

3-4 credits.

Theory and research on the social origins, processes and effects of law; examination of law-related behavior, legal institutions, law and social structure, and law and social change; linkage to contemporary theoretical and political debates.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 711 – CONTRACTS I**

3-4 credits.

Creation of promissory liability; interpretation of words and conduct; exchange, reliance or formality as necessary for creation of promissory liability; remedies for breach of contract; unfairness as a reason for avoiding contractual liability.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 714 – CIVIL PROCEDURE I**

4 credits.

Development of the modern civil action including pleading, discovery, and the pretrial conference; the trial; motions after verdict and judgment; appeals; state and federal procedures.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 715 – TORTS I**

3-5 credits.

Introduction to torts. Roughly defined as civil wrong, independent of contract. Liability for physical and emotional harms inflicted by intentional misconduct or negligence, or without fault, and development of concepts and techniques in analyzing and solving tort problems.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 721 – CONTRACTS II**

2-4 credits.

Nature of the obligations assumed by entering a contract; the power of parties to control this obligation; rights of those not a party to a contract.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**LAW 723 – LEGAL RESEARCH AND WRITING**

0-3 credits.

Legal research and legal bibliography, techniques of writing, organizing legal material, analyzing facts, and determining and predicting rules of law; library and computerized research; memoranda and brief writing; oral argument in moot court; small group critiques.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 724 – PROPERTY**

4-5 credits.

Foundation for advanced courses. Personal property and real property (land law); concepts of ownership and transfer of chattels (personal property), such as bailments, liens, pledges and gifts; historical introduction to law of real property precedes detailed study of nature of various ownership interests in land, called estates; landlord-tenant law; some preliminary treatment of land transfer (conveyancing).

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 725 – INTRODUCTION TO CRIMINAL PROCEDURE**

3 credits.

Various aspects of criminal procedure and criminal justice administration. Constitutional limitations upon criminal justice practices.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 726 – INTRODUCTION TO SUBSTANTIVE CRIMINAL LAW**

3-4 credits.

Problems in defining what conduct should be subject to criminal penalties; the limitations of criminal law as a means for prevention and control of undesirable conduct.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 730 – FEDERAL LAW AND INDIAN TRIBES**

2-3 credits.

The study of the relationships between Federal, state, and tribal governments, the source and scope of their respective sovereignties, and time.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 731 – CONSTITUTIONAL LAW I**

3-4 credits.

Powers of government, state and federal, under the Constitution of the United States; relations between federal and state authority (e.g., taxation and regulation of interstate commerce); relations between branches of the federal government; limitations on governmental authority by virtue of a distribution of power.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 732 – REAL ESTATE TRANSACTIONS I**

3-4 credits.

Basic legal elements of real estate transfer and finance; options, binder contracts, requirements as to writing, rights and duties between vendor and vendee, basic land contract and mortgage law and remedies, and the real estate recording system.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 735 – PAYMENTS SYSTEMS**

3 credits.

Articles 3, 4, and 5 of the Uniform Commercial Code: negotiable instruments, bank collection systems, and letters of credit.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**LAW 736 – SECURED TRANSACTIONS**

3 credits.

Focuses on Article 9 of the Uniform Commercial Code, Secured Transactions; with some additional emphasis on Article 6, Bulk Sales; and Article 7, Documents of Title.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 739 – RELIGION AND THE CONSTITUTION**

2-3 credits.

Covers the Free Exercise Clause and the Establishment Clause of the First Amendment to the U.S. Constitution.

**Requisites:** LAW 731**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016



**LAW 740 – CONSTITUTIONAL LAW II**

2-4 credits.

Rights of citizens against state and federal governments; the nature of due process and the equal protection of the law; the protection of freedom from invidious discrimination; the Civil Rights Acts; freedoms of expression, association, and religion.

**Requisites:** LAW 731**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 741 – BUSINESS ORGANIZATIONS II: PUBLICLY HELD CORPORATIONS**

3-4 credits.

Law of business corporations; problems of control, management, and procurement and maintenance of capital; an introduction to securities regulation.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 742 – TAXATION I**

3-5 credits.

Federal income taxation; basic rules, theory and policy.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 743 – NEGOTIATIONS**

2-4 credits.

Examines a range of processes encountered by lawyers, including negotiation of, inter alia, injury claims, criminal charges, family disputes, and commercial disputes, as well as participation of their parties (mediators, judges).

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 744 – ADMINISTRATIVE LAW**

3 credits.

Role of the administrative process in society; emphasizes common powers and procedures; relationships among the legislative, judicial, executive and administrative agencies in the development of public policy.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 745 – LABOR RELATIONS LAW**

3 credits.

Regulation of organization and representation of employees; collective bargaining, and employer and union practices; proceedings under the National Labor Relations Act and related federal statutes and analogous state acts.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 746 – LEGISLATION**

3 credits.

Use of statutes and legislative materials in litigation and decision; problems of the lawyer in the interpretation of statutes, in representation of the client before legislative bodies, and in the presentation and argument of statutory authorities to a court.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**LAW 748 – ANTITRUST**

3-4 credits.

Law relating to trade regulation and competitive practices; anti-trust and comparable laws dealing with monopoly, restraint of trade, and unfair methods of competition.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**LAW 749 – TRADEMARKS**

2-3 credits.

Practical introduction to a neglected but socially and economically important field. Interaction of a developing common and federal law with the behavior and interests of businesspersons and consumers.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**LAW 751 – PATENT LAW**

2-4 credits.

Survey of the law of industrial property, including the law of patents and trade secrets.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LAW 752 – COPYRIGHT LAW**

2-4 credits.

Survey of state and federal laws affecting a variety of intellectual and creative products.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**LAW 753 – INTRODUCTION TO INTELLECTUAL PROPERTY LAW**

3-4 credits.

Survey of the laws of patents, copyrights, trade secrets, trademarks. Discussion of relationship of these laws to the laws of property, trade regulation, and privacy. Exploration of competing or complementary policy rationales for each intellectual property area.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAW 760 – ROLE OF THE POLICE IN A FREE SOCIETY**

3 credits.

Major problems especially in large urban areas. Specific aspects of the police function, such as their role in responding to serious deviant conduct, to self-destructive behaviour, to community conflict, and to the need for protecting constitutional rights and democratic processes. Problems that arise in defining police authority, in reviewing and controlling police discretion, and in seeking to achieve accountability of the police to the citizenry.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**LAW 765 – EQUAL EMPLOYMENT LAW**

3-4 credits.

The growth, development, and implementation of equal employment opportunity law.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW/MED SC-M/NURSING 768 – CONSUMER HEALTH ADVOCACY AND PATIENT-CENTERED CARE CLINICAL**

1-7 credits.

Interdisciplinary health advocacy clinical supervised by diverse professional staff. Provide broad advocacy to patients with life-threatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 771 – SELECTED TOPICS IN ESTATE PLANNING**

1-3 credits.

Intermediate and advanced topics in estate planning; topics reflect interests of available faculty and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 772 – THE USE OF TRUSTS IN ESTATE PLANNING**

2-3 credits.

Survey of common uses of trusts in estate planning, with a focus on drafting of appropriate provisions to accomplish estate planning objectives.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 773 – LAW AND THE ELDERLY**

2-3 credits.

Addresses the issues faced by elderly clients and their families and caregivers in the context of legal, medical, social and regulatory concerns.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**LAW 785 – INTRODUCTION TO ISLAMIC LAW & JURISPRUDENCE**

2-3 credits.

Provides an understanding of the internal workings of Islamic law at its theoretical roots. Analyzes the various methodologies that are represented in Islamic legal literature, identify modern manifestations of these methodologies in contemporary Muslim discourses. Attention to the specific doctrinal areas of Islamic family law and criminal law. Contextualizes the subject of Islamic law within various governmental and constitutional structures, beginning with the classical period, continuing through colonialism and reaching into the present day.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**LAW 801 – EVIDENCE**

4 credits.

Concepts of relevancy and policy in admission of evidence; hearsay, opinions, and other exclusionary rules; examination of witnesses, judicial notice, and procedural considerations.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 802 – CIVIL PROCEDURE II**

3-4 credits.

Jurisdiction of courts, state and federal; joinder of claims and parties in civil action, and effect of judgments.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 808 – ADVANCED LEGAL WRITING**

2-3 credits.

Preparation of legal documents in connection with a real or simulated legal problem. Emphasis on legal problems involving writing experiences.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 811 – ACCOUNTING AND LAW**

3 credits.

Principles of accounting for lawyers.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 814 – APPELLATE ADVOCACY I**

2-3 credits.

Basics of brief writing and oral advocacy.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**LAW 815 – APPELLATE ADVOCACY II**

1-3 credits.

Participate in moot court tournaments in which, as representatives of the Law School, they engage in regional and national brief-writing and oral-advocacy competitions against students of other law schools.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 817 – BUSINESS ORGANIZATIONS I**

3-4 credits.

Law of employment, agency, partnership, limited partnership, and other types of unincorporated associations.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 818 – COMPARATIVE LAW**

2-3 credits.

Exploration of a number of different legal traditions and an investigation of how societal expectations of law change depending on its historical legal tradition.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**LAW 820 – CONFLICT OF LAWS**

3-4 credits.

Rules applied by courts in recognizing and enforcing rights involving elements which occurred in a sister state or foreign country.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LAW 821 – BANKRUPTCY LAW**

2-4 credits.

Consumer credit regulation, enforcement of judgments, attachments, garnishments, fraudulent conveyances, assignments for the benefit of creditors, and bankruptcy.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW/SOC WORK 822 – FAMILY LAW: MARRIAGE AND DIVORCE**

2-4 credits.

Marriage and less formal spousal relationships, husband-wife relationships in on-going marriage; divorce and its economic and custody consequences; post-divorce relationships.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAW/SOC WORK 823 – FAMILY LAW: PARENT AND CHILD**

3-4 credits.

The relationship of parent and child; the rights of unmarried mothers and fathers and their children; parental rights to custody vis a vis third parties; parents' rights to make decisions affecting children; neglect; termination of parental rights; the foster care system and adoption.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**LAW 824 – FEDERAL JURISDICTION**

3 credits.

Examines the structure and authority of the federal courts and the relationship between those courts and other governmental institutions.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 825 – INSURANCE LAW**

3-4 credits.

Substantive law of property, life and liability insurance, including study of the fire and automobile forms; regulation of insurance companies, policies and practices.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAW 827 – INTERNATIONAL LAW**

2-3 credits.

Problems in private and governmental practice affected by international relations; the law applicable to questions of recognition and non-recognition of governments and nations; interpretation of treaties and other international agreements; jurisdiction of nations; effect of peace and war; formation, operation and function of various international agreements, and matters of international claims.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 828 – INTERNATIONAL TRANSACTIONS**

2-3 credits.

Problems inherent in international commercial transactions; risks, benefits, and assumptions underlying business with or in a foreign country; international commercial transactions, investments and claims.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LAW/URB R PL 830 – LAND USE CONTROLS**

3 credits.

Limitations imposed upon the use of privately owned land by the court-made law of nuisance, by private covenant, and by public action; master plan, official map, subdivision regulation, zoning, and urban redevelopment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 838 – REAL ESTATE TRANSACTIONS II**

2-3 credits.

Law of real estate finance, planning, and development, including tax and organizational aspects.

**Requisites:** LAW 732 and 742

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 839 – REMEDIES**

2-3 credits.

Remedies of quasi-contract, constructive trust, equitable lien, reformation, etc., to redress enrichment obtained by tort, part performance of contract, duress, or mistake, or under other circumstances making its retention without such redress unfair.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**LAW 840 – TAXATION II**

2-4 credits.

Overview of the federal income taxation of partnerships, LLCs, and corporations, with a focus on issues of real property ownership and transfers.

**Requisites:** LAW 742**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 845 – WATER RIGHTS LAW**

2-3 credits.

Acquisition and nature of private rights in water comparing the riparian and appropriation legal systems; public rights as limitations on private rights, the firming up of rights by grant, contract, compulsory purchase and prescription and the administrative systems for water quality management.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 848 – INTRODUCTION TO ENVIRONMENTAL LAW**

3 credits.

Overview of major environmental statutes, regulations and cases, and their implementation by regulatory agencies, as well as currently applicable common-law doctrine.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 849 – PRE-TRIAL ADVOCACY**

3 credits.

The skills that lawyers use up until the time of trial.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 850 – PROFESSIONAL RESPONSIBILITIES**

1-3 credits.

The ethical and professional responsibility of practicing lawyers.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 852 – TRIAL ADVOCACY**

2-4 credits.

Techniques involved in the examination of witnesses, including the lawyer's preparation, the preparation conference with the witness, direct examination, cross examination, objections, and the introduction of exhibits. Teaching methods include demonstrations by trial lawyers and practice sessions by the students under the supervision of trial lawyers.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 854 – CLINICAL PROGRAM**

1-7 credits.

Provides hands-on lawyering experiences with real people - clients, victims, witnesses, family members, lawyers, and judges - enhancing understanding of the roles and responsibilities of practicing attorneys.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 858 – COLLECTIVE BARGAINING: THE ARBITRATION PROCESS**

3 credits.

Legal and economic aspects of current issues in collective bargaining.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**LAW 860 – ADVANCED CRIMINAL PROCEDURE**

2-3 credits.

Various important procedural problems arising in federal and state criminal proceedings.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**LAW 862 – LEGAL ASSISTANCE TO INSTITUTIONALIZED PERSONS**

1-7 credits.

Develops an understanding of institutional programs for convicted criminal offenders and confined mental health patients; interview newly admitted inmates or mental patients. These interviews determine whether there are aspects of each person's conviction or commitment, his or her current institutional treatment, or relationship with the outside world, which need the assistance of a legally trained person. An opportunity to develop interviewing, analytical, writing, and problem-solving abilities.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 868 – STATE AND LOCAL TAXATION**

2-4 credits.

Survey of state and local tax law, principally income taxes, sales and use taxes, and property taxes. Explores the typical statutory structures under which these taxes are imposed. Significant emphasis will be given to policy issues faced by state and local governmental bodies.

**Requisites:** LAW 742**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**LAW 870 – INTERNATIONAL TAX**

3 credits.

International taxation concepts and issues including jurisdiction rules, tax avoidance and evasion, fiscal relations between industrialized countries and less developed countries; host country taxation of foreign persons and home country taxation of foreign income.

**Requisites:** LAW 742**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 871 – INTERNATIONAL TRADE LAW**

3 credits.

Legal institutions affecting international transactions with a focus on U.S. laws and the principal treaties involved.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LAW 872 – LEGAL ISSUES INVOLVING NORTH AMERICA AND EAST ASIA**

2 credits.

Public and private laws affecting international trade and investment flows between North America and East Asia as well as other issues that affect relations between the countries.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**LAW 873 – IMMIGRATION LAW**

3 credits.

Survey of the immigration law of the United States.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW 880 – CLIENT COUNSELLING**

1-3 credits.

Client interviewing, analysis of problems as presented by clients, techniques for client counseling and related law office practices. Practice counseling of clients in hypothetical cases under the supervision of experienced practitioners.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**LAW 895 – WISCONSIN INTERNATIONAL LAW JOURNAL**

1-3 credits.

A student published law journal dealing with legal issues having significant international aspects. Each volume is comprised of student case notes and comments as well as articles by legal scholars and practitioners.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 896 – WISCONSIN JOURNAL OF LAW, GENDER, AND SOCIETY**

1-3 credits.

A student-published journal devoted to the intersection of law and gender with issues of race, ethnicity, socioeconomic status, and sexual orientation.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**LAW 899 – LAW REVIEW**

1-3 credits.

A journal of legal analysis and commentary. Review select and edit the articles and participate in every stage of the publication process.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 904 – SELECTED PROBLEMS IN CONSTITUTIONAL LAW SEMINAR**

2-4 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 905 – BIOETHICS AND THE LAW**

2-4 credits.

Introduction to the legal, ethical and public policy dimensions of modern medicine and biomedical research. Informed consent, human experimentation, death and dying, organ transplantation, allocation of scarce resources. May cover reproductive and genetic issues.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**LAW 906 – LAW, SCIENCE AND BIOTECHNOLOGY SEMINAR**

2-4 credits.

Legal, ethical, social and public policy questions raised by modern scientific and technological developments, with a particular focus on biotechnology.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**LAW 914 – SECURITIES REGULATION**

3 credits.

Problems under the Securities and Exchange Act and other federal and state regulatory measures; operation of the S.E.C.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 915 – SELECTED PROBLEMS IN CRIMINAL JUSTICE ADMINISTRATION SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 918 – SELECTED PROBLEMS IN INTERNATIONAL LAW-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 922 – SELECTED PROBLEMS IN JURISPRUDENCE-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 926 – SELECTED PROBLEMS OF TORT LAW-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**LAW 928 – SELECTED PROBLEMS IN LAND LAW-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 932 – SELECTED PROBLEMS OF ADMINISTRATIVE LAW-SEMINAR**

2-3 credits.

Topics reflect interests of the instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**LAW 935 – HEALTH LAW AND ADMINISTRATION SEMINAR**

2-3 credits.

The distribution of health services among income groups; financing of health care; standards of quality; and health policy planning.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LAW 936 – TORTS II**

2-3 credits.

Advanced torts, involving the interests in family, social, professional, trade and political relations, and individual dignity (defamation, disparagement, invasion of privacy by private persons and the state); protection of these interests by the law of torts and alternative means; constitutional dimensions of the problem.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**LAW 939 – SELECTED PROBLEMS IN FAMILY LAW-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 940 – LAW AND CONTEMPORARY PROBLEMS**

2-3 credits.

Relationship of law to current public issues. Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 942 – EUROPEAN UNION LAW**

2-3 credits.

Introduction to European Union law, including the relationship between EU and Member State law, EU institutions, the law of the common market (i.e., free movement of goods, persons, services and capital) and environmental law and social policy.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**LAW 945 – LAW AND CORRECTIONAL INSTITUTIONS-SEMINAR**

2-3 credits.

Practice of criminal corrections and the law governing it; probation, parole, rehabilitative efforts, prison administration, and legal and administrative procedures for testing the propriety of restrictions.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**LAW 950 – LAWYERING SKILLS COURSE**

0-10 credits.

Training in skills used when applying the law in general practice. Focuses on the skills of interviewing, drafting, negotiations, and using time efficiently; in the context of criminal defense, probate, debtor-creditor, corporations, preparation for civil trial, divorce, real estate, administrative proceedings, and law office operation.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LAW 953 – SELECTED PROBLEMS IN BUSINESS ORGANIZATION-SEMINAR**

1-3 credits.

In business planning and business organizations including proprietorships, partnerships, corporations and trusts.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**LAW 954 – CORPORATE FINANCE LAW**

3 credits.

Presents the basics of finance for business lawyers, and the law and legal strategy surrounding the creation of debt instruments.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**LAW 955 – PUBLIC SECTOR LABOR RELATIONS LAW SEMINAR**

2-3 credits.

Legal and public policy issues relating to public sector unionism in a multiplicity of jurisdictions, including representation questions, scope of bargaining, limitations on the right to strike, impasse procedures, and grievance arbitration.

**Requisites:** Declared in Law JD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**LAW 957 – INTRODUCTION TO ESTATE PLANNING**

2-3 credits.

Issues related to estate planning; including function of the lawyer, ethical issues, estates not subject to tax, basic elements of tax-oriented planning, living trusts, health care issues, gift strategies.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LAW/ECON 961 – SELECTED PROBLEMS IN TRADE REGULATION-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**LAW 981 – LAW AND MODERNIZATION IN THE DEVELOPING WORLD SEMINAR**

2-3 credits.

Law as a system of social engineering in the economic and social modernization of developing countries. Problems of developing rules with a high probability of inducing behavior likely to lead to modernization.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2018**LAW 988 – SELECTED PROBLEMS IN ENVIRONMENTAL LAW-SEMINAR**

2-3 credits.

Topics reflect interests of instructor and students.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**LAW 989 – ENVIRONMENTAL LAW AND PRACTICE**

3 credits.

Presents environmental statutes, cases, and regulations, and discusses their implementation. Focuses on both law and practice. Provides a survey of substantive environmental law and their application in permitting, commercial transactions and enforcement.

**Requisites:** Declared in Law JD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**LAW 990 – DIRECTED RESEARCH**

1-12 credits.

Faculty supervision on research; scope and subject arranged between student and faculty.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LAW 991 – DIRECTED READING**

1-3 credits.

Independent readings from a list prepared by instructor. Subject matter determined by agreement between instructor and student.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LEGAL STUDIES (LEGAL ST)****LEGAL ST/SOC 131 – CRIMINAL JUSTICE IN AMERICA**

3-4 credits.

Day-to-day functioning of the elements of the criminal justice system in the U.S. Nature of crime in the U.S., ideas about causes and solutions. Emphasis on the sociology of the components of criminal justice system--organization and roles of police, lawyers, court and correctional personnel.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST/RP & SE 135 – DISABILITY AND THE CRIMINAL JUSTICE SYSTEM**

3 credits.

Explores the interaction between the criminal justice system and disability. Explores common experiences of persons with disability such as limited access to community services, poverty, and homelessness and the connection of these experiences to mass incarceration. Explores federal disability rights laws and the implementation of these laws in education, legal, and incarceration settings. Introduction to criminal justice reform to address the experiences of persons with disabilities in this system.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No

**LEGAL ST/JEWISH/RELIG ST 203 – JEWISH LAW, BUSINESS, AND ETHICS**

3 credits.

Explores the development of Jewish law from antiquity to modernity, with a focus on legal questions related to business practices and ethics. Consider issues ranging from ethical practices in agriculture to how to run a modern multi billion-dollar kosher industry; from the ethics of Jews celebrating Thanksgiving to regulations governing the preparation, consumption, and sale of coffee.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LEGAL ST/POLI SCI 217 – LAW, POLITICS AND SOCIETY**

3–4 credits.

Introduction to the legal process. Examination of the various concepts of law, the perennial problems of the law, legal reasoning, and the nature and function of law and the courts.

**Requisites:** Freshman or sophomore standing only**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST/HISTORY 261 – AMERICAN LEGAL HISTORY TO 1860**

3–4 credits.

Surveys the development of American law down to the U.S. Civil War. Reviews the English historical background, and examines how law changed in colonial America, culminating in the framing of the U.S. Constitution. Explores how territorial expansion, democracy, and slavery shaped nineteenth-century American law. Emphasis is on how law interacts with political, social, and cultural change, with a focus on the origins of modern civil and constitutional rights.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LEGAL ST/HISTORY 262 – AMERICAN LEGAL HISTORY, 1860 TO THE PRESENT**

3–4 credits.

Surveys the development of American law from the Civil War to the early Twenty-First Century. After a review of the U.S. Constitution and its modification by the Civil War amendments, examine the legal dimensions of such topics as race relations and the Civil Rights movement, the growth of modern business, the New Deal, labor rights, the women's movement, the individual rights revolution of the postwar period, and the contemporary conservative reaction. Emphasis on how law interacts with political, social, and cultural change.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST 325 – WRONGFUL CONVICTIONS**

3 credits.

Study of evidentiary causes of wrongful convictions, including eyewitness misidentifications, false confessions, the use of jailhouse informants, and flaws in forensic science. Procedural and institutional causes of wrongful convictions, and within this context, question whether constitutional rights adequately protect against illegitimate outcomes. Explore potential ways to broaden conceptions of wrongful convictions, looking at mass surveillance, mass prosecution, mass conviction, sentencing severity, and the system's racially disproportionate impact at all intercept points.

**Requisites:** LEGAL ST/SOC 131 or 217**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LEGAL ST 400 – TOPICS IN LEGAL STUDIES AND THE SOCIAL SCIENCES**

3–4 credits.

Addresses a variety of issues linking various social sciences perspectives to the central themes of law and legal institutions.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LEGAL ST 405 – FOUNDATIONS OF FIELD EDUCATION**

2 credits.

Preparation for extensive, hands-on internship at a community criminal or juvenile justice agency.

**Requisites:** Declared in Criminal Justice certificate**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017

**LEGAL ST 407 – JURISPRUDENCE AND SOCIAL ISSUES**

3 credits.

Examines fundamental questions about the nature and content of law, addressing both analytic and normative jurisprudence. Questions in analytic jurisprudence include: What does it mean for something to be the law? Why are some things a matter of law, while others are not? What is the relationship between law and morality? Is the law exhausted by the meaning of words in constitutions and statutes? Questions of normative jurisprudence concern the proper content of law, such as, what should the law permit, prohibit, and promote? These questions are examined by looking at a number of topics that are at issue in U.S. (and other nations') laws. These will include interpreting criminal law statutes, policies promoting public welfare, and the justifications for property, especially intellectual property rights.

**Requisites:** LEGAL ST/SOC/LEGAL ST 131, LEGAL ST/POLI SCI/LEGAL ST 217, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LEGAL ST 409 – HUMAN RIGHTS IN LAW AND SOCIETY**

3 credits.

Introduction to the theory, the politics and the sociology of human rights. Main themes: international human rights legal regime, questions of why human rights have become "legalized," and what the consequences of this legalization are on the ground.

**Requisites:** SOC/LEGAL ST/SOC 131, LEGAL ST/POLI SCI/LEGAL ST 217, or Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST/SOC 415 – THE LEGAL PROFESSION**

3-4 credits.

History, structure, and functioning of legal professions in the United States and in other countries around the world.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**LEGAL ST/GEN&WS 422 – WOMEN AND THE LAW**

3 credits.

Legal system, laws, and proposed legislation that have specific impact on the lives of women. Topics investigated in both the social and legal contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**LEGAL ST/GEN&WS/SOC 425 – CRIME, GENDER AND JUSTICE**

3 credits.

Focuses on the intersection between gender, crime and justice from a cross-cultural perspective. The gendered nature of the criminal justice system, female experiences of crime, prosecution and incarceration as well as the extent to which women are victims, offenders, and participants in the criminal justice system will be explored. Special emphasis will be placed on the theoretical implications of offending behavior and the intersection of gender with sexuality, race, ethnicity and class. The goal of this course is to provide a foundation for critically assessing the often controversial issues surrounding race, gender, crime, and criminal justice in society.

**Requisites:** LEGAL ST/SOC/LEGAL ST 131, GENSW 101, 102, 103 or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST/HISTORY 426 – THE HISTORY OF PUNISHMENT**

3-4 credits.

Examines punishment across a vast range of historical traditions, examining how wrongdoing and punishment have been figured in law, literature, art and philosophy. Examines ancient, medieval and modern traditions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**LEGAL ST/ENVIR ST/HISTORY 430 – LAW AND ENVIRONMENT: HISTORICAL AND CONTEMPORARY PERSPECTIVES**

3 credits.

Explores environmental studies through a focus on law and legal history. Although its main concentration is on U.S. environmental law, the course will begin and end with broader historical and global perspectives.

Topics include a survey of English, European, and early American legal approaches to land use, natural resources, and pollution through World War II as well as an examination of the development and practice of contemporary U.S. environmental law and consideration of the recent emergence of international environmental law.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST 435 – CIVIL RIGHTS: POLICING, PRISONS, VOTING, HOUSING, EMPLOYMENT**

3 credits.

Exploration of civil rights. Question what it means to discriminate (on the basis of race, sex, national origin, religion, and disability), how we might investigate and detect acts of discrimination, and the legal constraints on governmental efforts to remedy discrimination in employment, housing, and voting. Explore the intersection of government power and civil rights. Examine how the government targets groups during times of national crisis. Consider what constitutes acceptable conditions of incarceration for prisoners. Finally, learn police use-of-force doctrine, and discuss the challenge of protecting both officer and civilian safety.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LEGAL ST/CHICLA/SOC 440 – ETHNICITY, RACE, AND JUSTICE**

3-4 credits.

An examination of ethnicity, race, and justice, with a specific emphasis on US Latinos, the largest minority group in the United States.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/ SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LEGAL ST/CHICLA/SOC 443 – IMMIGRATION, CRIME, AND ENFORCEMENT**

3-4 credits.

A study of immigration, crime, and border enforcement, engaging both historical and present-day debates, focusing on Latino immigration and the U.S.-Mexico border.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/ SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST 444 – LAW IN ACTION**

3 credits.

A review of the interaction of law (judicial decisions, legislation, administrative actions) with public policy by studying the approaches used to resolve a number of significant issues by use of law and examining the actual impact of such efforts.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST 450 – TOPICS IN LEGAL STUDIES AND THE HUMANITIES**

3-4 credits.

Addresses a variety of issues linking various humanities perspectives to the central themes of law and legal institutions.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LEGAL ST/HISTORY 459 – RULE OF LAW: PHILOSOPHICAL AND HISTORICAL MODELS**

3-4 credits.

From the perspectives of history and political theory, examines the multiple meanings of the idea of the rule of law, and its uses in American history. Explore prominent critiques of the rule of law ideal.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**LEGAL ST/LIS 460 – SURVEILLANCE, PRIVACY, AND POLICE POWERS**

3 credits.

Examines individual privacy and government information collection in law enforcement, security, public health, administrative law, and other contexts from a variety of disciplinary perspectives.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**LEGAL ST 473 – HEALTH IMPACTS OF UNMET SOCIAL NEEDS**

3 credits.

Engage in service learning through direct work with patients in the Community Resource Navigator Program. Develop a better understanding of how social determinants of health equity affect peoples' lives. Partner with patients to identify social and legal services, assist patients in connecting to needed resources, follow up with patients to be sure that the connection was made and evaluate the quality of the resources provided. Reflect on experiences in the clinic and further explore how social location impacts health, legal and social service delivery. Working directly in local primary care clinics will provide the opportunity to communicate directly with the health care team to problem solve barriers patients are facing in accessing resources for their social needs.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST/HISTORY 476 – MEDIEVAL LAW AND SOCIETY**

3 credits.

Introduction to the central historical developments of law and legal institutions in the European middle ages (400-1500).

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LEGAL ST/HISTORY 477 – HISTORY OF FORENSIC SCIENCE**

3 credits.

Examines the diverse paths followed by forensic science (including medical jurisprudence or forensic medicine) in various times and places, focusing on the English-speaking world from the nineteenth century until the present. Explore the many ways that law and science have worked together--or at cross-purposes--to generate and assess evidence at the crime scene, in the lab, in the courtroom, and beyond.

**Requisites:** Sophomore standing and (HISTORY/LEGAL ST/HISTORY 261, LEGAL ST/SOC/LEGAL ST 131, or LEGAL ST/POLI SCI/LEGAL ST 217), or graduate/professional standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LEGAL ST/HISTORY 510 – LEGAL PLURALISM**

3 credits.

Historical and anthropological perspectives on non-state "law," or systems of rules generated by normative orders that lay beyond the state; case studies include the mafia, Tokyo tuna traders' court, orthodox Jewish diamond merchants, California gold miners' courts, Inuit song dueling.

**Requisites:** Sophomore standing and (HISTORY/LEGAL ST/HISTORY 261, LEGAL ST/SOC/LEGAL ST 131, or LEGAL ST/POLI SCI/LEGAL ST 217), or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LEGAL ST 600 – SPECIAL TOPICS IN LEGAL STUDIES**

1-3 credits.

Special seminars are designed for opportunities such as short international seminar courses, the summer forum, and other special opportunities.

**Requisites:** Junior standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**LEGAL ST/LAW/SOC 641 – SOCIOLOGY OF LAW**

3-4 credits.

Theory and research on the social origins, processes and effects of law; examination of law-related behavior, legal institutions, law and social structure, and law and social change; linkage to contemporary theoretical and political debates.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LEGAL ST/L I S 645 – INTELLECTUAL FREEDOM**

3 credits.

An examination of intellectual freedom in the United States including censorship, minors' rights, the Internet, privacy, and copyright with focus on theoretical questions related to the First Amendment to the U.S. Constitution, and historical developments.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**LEGAL ST/L I S 663 – INTRODUCTION TO CYBERLAW**

3 credits.

The emphasis is on critical thinking about a broad variety of legal and policy problems that arise because of ever-changing information and communication technologies.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST 681 – SENIOR HONORS THESIS**

3–4 credits.

Individual study for majors writing theses for honors degree.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Summer 2022**LEGAL ST 682 – SENIOR HONORS THESIS**

3–4 credits.

Individual study for majors writing theses for honors degree.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LEGAL ST 691 – SENIOR THESIS**

3 credits.

Individual study for majors writing senior thesis (nonhonors).

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LEGAL ST 692 – SENIOR THESIS**

3 credits.

Individual study for majors writing senior thesis (nonhonors).

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST/SOC 694 – CRIMINAL JUSTICE FIELD OBSERVATION**

2–3 credits.

Field placements and seminar sessions to develop sociological understanding of criminal justice processes. Placement in criminal justice agencies and lectures and discussions applying concepts and theories to field experience.

**Requisites:** Declared in Criminal Justice certificate and SOC/LEGAL ST/SOC 131**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Workplace – Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LEGAL ST 699 – DIRECTED STUDY**

1–4 credits.

Directed study in legal studies.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## LIBRARY AND INFORMATION STUDIES (L I S)

**L I S/COMP SCI 102 – INTRODUCTION TO COMPUTING**

3 credits.

Provides a broad overview of computing at an introductory level, including topics such as security, robotics, and artificial intelligence. Increases understanding of how computers work and how algorithms solve problems. Design and implement creative applications in an introductory coding environment. Provides a broad overview of computing and algorithms without an emphasis on programming.

**Requisites:** MATH 096 or placement into MATH 141. MATH 118 does not fulfill the prerequisite. Not open to students with credit for COMP SCI 300 or 320**Course Designation:** Gen Ed – Quantitative Reasoning Part A

Breadth – Natural Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**L I S 201 – THE INFORMATION SOCIETY**

4 credits.

Examines important social, legal, and historical contexts of information and information technologies, and explores significant social, legal, and moral questions that surround those technologies.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 202 – INFORMATIONAL DIVIDES AND DIFFERENCES IN A MULTICULTURAL SOCIETY**

3 credits.

Explores the impact of and barriers to access to information on the lives of low-income ethnic/racial minority communities in the United States. Provides introduction to contemporary information society from a sociological perspective.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 301 – INFORMATION LITERACIES IN ONLINE SPACES**

3 credits.

Explores information and digital literacies needed by today's online consumers and producers. Covers skills and topics related to access (digital divides, power relations in online communities, regulation), analysis (assessing credibility, evaluating risks, analyzing representation) and production (blogging, videosharing, gaming).

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S 340 – TOPICS IN INFORMATION STUDIES - SOCIAL ASPECTS**

3 credits.

Exploration of contemporary issues related to information in society. Subject will vary. Examples include, but not restricted to: Information Ethics, Digital and Print Culture, Global Information Flows.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2020

**L I S 341 – TOPICS IN INFORMATION STUDIES - TECHNOLOGICAL ASPECTS**

1-3 credits.

Exploration of information technology and information management subjects. Subjects will vary. Examples include, but not restricted to: A Social History of Information Infrastructure, Digital Productivity Tools and Debates, Digital Publishing Standards and Tools, Digital Preservation.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**L I S 350 – HISTORY AND FUTURE OF BOOKS**

3 credits.

Framed by a question about what books are, what books have been, and what books might be: past, present, and future. It assumes that "book" is a placeholder term for an object that becomes the site of questions and debates about a variety of media, expressions, and recording practices. A goal of the class is to understand the book as an active technology that shapes peoples, perceptions, and cultures rather than serving as a passive receptacle of them. This course will approach the book from a number of perspectives including book history, digital humanities, media studies, and human computer interaction, as well as examining industry-oriented interests such as e-reader manufacturing, book retail, and publishing.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 351 – INTRODUCTION TO DIGITAL INFORMATION**

3 credits.

Prepares students to use information technologies to solve problems and help people through implementing information infrastructures such as websites, databases and metadata. Students will explore information access, information representation, usability and information policy issues, and increase their understanding of the social impacts and social shaping of information infrastructures.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 399 – INDEPENDENT READING AND RESEARCH**

1-4 credits.

Concentrated work on a subject or problem of the student's need or interest; students must submit a written report, paper, or other product covering the work accomplished.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 407 – DATA STORYTELLING WITH VISUALIZATION**

3 credits.

Introduction to data visualization including how and why visualization can be an effective tool for summarizing, analyzing and communicating about data, the limitations and challenges in using data visualizations, including misrepresentation and bias and planning appropriate types of visualization(s) based on source data, audience, and goals. Instruction will include hands-on experience with popular visualization software platforms to develop visualizations and presentations.

**Requisites:** Sophomore standing and satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 440 – NAVIGATING THE DATA REVOLUTION: CONCEPTS OF DATA & INFORMATION SCIENCE**

3 credits.

Provides an introduction into the world of Data Science. Includes hands-on projects using scenarios involving analysis of real-world data and development of graphical visualizations. Introduces statistical tests, data management, data programming, data ethics and visualization of data.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement, Satisfied Communications A requirement, and sophomore standing

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/AFRICAN/COM ARTS 444 – TECHNOLOGY AND DEVELOPMENT IN AFRICA AND BEYOND**

3 credits.

Surveys the past 20 years of digital technology and communications culture on the African continent, cross-referenced with discourse on technology experiences in other parts of the developing world, through the framework of development studies. Readings include case studies of micro-tech practices as well as political and social use of new media, and government and NGO-led tech interventions. Information Communication Technology for Development (ICT4D) is a key area of focus. Cross-discipline areas include communications and media studies, African, Latin American and International area studies, as well as the social anthropology of technology and science, and design. Think critically about technology use in the context of different tech cultures from around the world. Apply this perspective towards new media solutions to social problems.

**Requisites:** Junior standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/LEGAL ST 460 – SURVEILLANCE, PRIVACY, AND POLICE POWERS**

3 credits.

Examines individual privacy and government information collection in law enforcement, security, public health, administrative law, and other contexts from a variety of disciplinary perspectives.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**L I S 461 – DATA AND ALGORITHMS: ETHICS AND POLICY**

3–4 credits.

An introduction to ethical, legal and policy issues related to analytics, "big data" and algorithms to support decision making. Gain familiarity with major debates and controversies in a variety of contexts. Critically analyze course materials and apply moral reasoning and legal concepts to assess case studies and critique arguments made by others.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 464 – APPLIED DATABASE DESIGN**

3 credits.

Introduces the applications of databases to real-world data and information problems. Overview of the principles and practices of user-oriented database design, management, and application. Discussion and practice cover database application lifecycle, data modeling, relational database design, SQL queries, reports and other interfaces to database data, and database documentation.

**Requisites:** Sophomore standing and satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 470 – INTERACTION DESIGN STUDIO**

3 credits.

Introduces interaction design, an approach to designing digital information systems that places humans and their needs at the center of the design process. Explores how core principles of design, design processes, cognition, information science and human values inform the design of interactive information systems. Discussion and practice apply the data-driven process of human-centered interaction design to develop new digital products and services.

**Requisites:** (Sophomore standing, satisfied Quantitative Reasoning (QR) A requirement, and satisfied Communications A requirement), or graduate/professional standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/FOLKLORE 490 – FIELD METHODS AND THE PUBLIC PRESENTATION OF FOLKLORE**

3 credits.

Combines a fieldwork practicum with scrutiny of the cultural, political, and ethical dimensions underlying the documentation and public presentation of folklore through festivals, exhibitions, publications, audio-visual productions, and digital archival collections.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**L I S 500 – CODE AND POWER**

3 credits.

Prepares students to analyze and critique the portrayal of race, gender and computing in various media outlets and to consider their own potential as contributors to the computing industries in light of media portrayals and their own self-perceptions. As students confront assumptions about gender race and computing, this course will also equip them with the skills necessary to confidently design, develop, and discuss web scripting aspects related to PHP website development.

**Requisites:** Junior standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science  
Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 501 – INTRODUCTION TO TEXT MINING**

3 credits.

Introduces computational methods and tools for processing, analyzing, and understanding text data. Topics include text data preparation and preprocessing, models of text content and meaning, exploratory text analytics, text classification, information extraction from texts, ethical issues in natural language processing (NLP), and related applications in information sciences and other fields. Develops practical skills to design and implement text mining solutions using popular NLP tools and programming packages.

**Requisites:** Junior standing and Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Breadth – Natural Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 510 – HUMAN FACTORS IN INFORMATION SECURITY**

3 credits.

Introduction to personal, social, and organizational concepts, skills, and processes related to the information security of individuals and organizations. Preparation to help individuals and organizations enhance their own security and privacy, especially but not exclusively online.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/NURSING/OCC THER 517 – DIGITAL HEALTH: INFORMATION AND TECHNOLOGIES SUPPORTING CONSUMERS AND PATIENTS**

3 credits.

Increases student understanding of appropriate and accurate materials for consumer health and family education; the ethical and organizational policy issues that arise when providing consumer and family health information in different settings; the role of the public media in disseminating health information; the health-related information needs and preferences of racial/ethnic minority populations. It also provides an introduction to health information technologies, from search engines to websites to apps, that put people in charge of managing their own health information.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science  
Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/HISTORY 569 – HISTORY OF AMERICAN LIBRARIANSHIP**

3 credits.

Development of American librarianship from Colonial times to the present, with special reference to the relationship of library institutions to their contemporary social, economic, cultural and political environments.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**L I S 601 – INFORMATION: PERSPECTIVES AND CONTEXTS**

3 credits.

Provides an introduction to major themes and topics in information studies as well as the language and literature of the field and related disciplines.

This course is about information, information agencies, and being an information professional. We look at social, historical, ethical, legal and political issues surrounding information dissemination, use, control, and management.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 602 – INFORMATION: ORGANIZATION AND SEARCH**

3 credits.

Introduces basic concepts and principles of information organization and online searching. Gain knowledge of information organization and retrieval theories and methods and knowledge of large database structures and database searching techniques. Critically examine the impact of information organization practices on organizations and culture. Learn how to develop information organizing systems and to evaluate and improve search systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S 603 – RESEARCH AND ASSESSMENT FOR INFORMATION PROFESSIONALS**

3 credits.

Introduces students to research, evaluation and assessment practices. Prepares students to design and implement a research or assessment project. Provides an overview of commonly employed data collection methodologies and introduces students to both qualitative and quantitative analysis approaches that may be employed in evaluation, assessment and research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/COMP SCI 611 – USER EXPERIENCE DESIGN 1**

3 credits.

Introduction to the user experience design including key stages of the design process, design ethics, and the methods and tools involved at each stage of design. Conduct formative research on clients, users, use contexts and tasks. Gain experience with user research methodologies and learn to create intermediate design tools such as personas. Develop and present a design proposal for a chosen project.

**Requisites:** Declared in Information MS, Design + Innovation MS , or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S/COMP SCI 612 – USER EXPERIENCE DESIGN 2**

3 credits.

Advanced study of UX design. Introduces processes of ideation, key concepts of visual design, conceptual and interaction design, low and high-resolution prototyping of design techniques. Applications include drafting designs based on user models and initial testing of prototypes.

**Requisites:** L I S/COMP SCI/L I S 611 and Declared in Information MS, Design + Innovation MS, or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/COMP SCI 613 – USER EXPERIENCE DESIGN 3**

3 credits.

Conduct formal evaluations of the user experience (UX) or usability of a digital system. Gain familiarity with the evaluation and research process including key stages, tasks for each stage, common data collection and analysis methods, and common tools employed in the field. Gain experience with a variety of UX evaluation approaches. Collect pilot data and develop a proposal for further UX testing.

**Requisites:** L I S/COMP SCI/L I S 612 and Declared in Information MS, Design + Innovation MS, or Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S/COMP SCI 614 – USER EXPERIENCE DESIGN CAPSTONE**

1 credit.

Applies a design studio critique approach to produce a learning environment of collaborative and interdisciplinary peer critique and learning, in addition to provide expert feedback and suggestions. Present and defend the latest iteration of the user experience design project developed in earlier courses while learning about the professions associated with digital user experience design.

**Requisites:** L I S/COMP SCI/L I S 613 and declared in Design + Innovation MS, or the Capstone Certificate in User Experience Design

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022



### **L I S 615 – SYSTEMS ANALYSIS AND PROJECT MANAGEMENT FOR INFORMATION PROFESSIONALS**

3 credits.

Introduces established and evolving methodologies for the analysis, design, and development of information systems involving people, data/information and technologies. Introduces students to basic concepts and tools of project management. Learn to apply systems analysis and project management methods to solve real world problems involving information flows and interactions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 616 – RECORDS MANAGEMENT**

1-3 credits.

An introduction to the role of records in society and to the principles and practices involved in managing records (both paper and electronic) in private and public sector organizations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **L I S/MUSIC 619 – MUSIC RESEARCH METHODS AND MATERIALS**

3 credits.

Historical and contemporary bibliography resources for musical scholarship; general reference tools of scholarly work and specific musicological works.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S/CURRIC 620 – FIELD PROJECT IN LIBRARY AND INFORMATION AGENCIES**

3 credits.

Analysis of field experience through seminars, individual conferences, required reading and consultations with cooperating librarians and information specialists. Enrollment limited.

**Requisites:** L I S 601 and 602 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 622 – CHILDRENS LITERATURE**

3 credits.

Traditional sources to the present; criticism and evaluation; contemporary trends and issues. Techniques of reading guidance in school or public library in relationship to developmental interests, needs and skills of children.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 629 – MULTICULTURAL LITERATURE AND RESOURCES FOR CHILDREN AND YOUTH**

3 credits.

Focuses on issues of diversity in literature and other media for children and young adults. Considers representation of ethnicities, socioeconomic status, gender, sexual orientation and (dis)ability. Issues addressed include authenticity, representation, cultural correctness, reader response and intellectual freedom. Students will gain skills to advocate for, promote, and assess multicultural resources; develop a collection; and understand issues related to cultural competence and reader response.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 631 – LITERATURE AND RESOURCES FOR YOUTH**

3 credits.

A survey of media interests and needs of young adults including books, film, television, audio, and production technologies. Critically examines media trends, materials, selection criteria, recommendations, and censorship. Students will develop an ability to advocate for and promote materials according to intellectual, emotional, social and physical needs of young adults.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 632 – METADATA STANDARDS AND XML**

3 credits.

An overview of the design and use of metadata for resource description and retrieval in digital environments. Learn to implement and evaluate standard schemes used in cultural heritage, commercial and other contexts including Dublin Core, MODS, VRA and others. Issues of information behavior, interoperability, quality control, vocabulary control and project management are covered.

**Requisites:** L I S 602**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**L I S 635 – REFERENCE AND INFORMATION SERVICE**

3 credits.

Theories, principles and practices of reference and information services.

**Requisites:** L I S 601 and 602 or concurrent enrollment**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**L I S 639 – PEDAGOGICAL THEORY AND PRACTICE FOR INFORMATION PROFESSIONALS**

3 credits.

Introduction to pedagogical theory, training tools, and teaching skills needed in a variety of informational instructional settings such as academic and public libraries, archival institutions, museums, and software training facilities. Applicable for students interested in information literacy instruction, online teaching, technology training, and group instruction..

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**L I S 640 – TOPICS IN LIBRARY AND INFORMATION STUDIES**

1-3 credits.

Current issues in library and information studies that are not addressed in sufficient depth in existing courses or that combine facets of several existing courses.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**L I S 642 – READING INTERESTS OF ADULTS**

3 credits.

An examination of the nature and societal functions of a variety of mass media-generated adult reading materials, the standards by which they are judged, and their relationship to contemporary library and information science fields.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**L I S 644 – DIGITAL TOOLS, TRENDS AND DEBATES**

3 credits.

Overview of information and communications technologies, digital media, and standards in relationship to information agencies, within the context of current societal controversies. Promotes technical knowledge of ICT and critical analysis of controversies surrounding ICT development, use and modification.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**L I S/LEGAL ST 645 – INTELLECTUAL FREEDOM**

3 credits.

An examination of intellectual freedom in the United States including censorship, minors' rights, the Internet, privacy, and copyright with focus on theoretical questions related to the First Amendment to the U.S. Constitution, and historical developments.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**L I S 646 – INTRODUCTION TO INFO ARCHITECTURE AND INTERACTION DESIGN FOR THE WEB**

3 credits.

Introduces students to basic concepts in information architecture, digital interaction design, usability testing, navigation, evaluation, and accessibility through planning, design and development of a web based information product or service. Students will also learn introductory web development technologies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **L I S/ART HIST/HISTORY/JOURN 650 – HISTORY OF BOOKS AND PRINT CULTURE IN EUROPE AND NORTH AMERICA**

3 credits.

History of books and print culture in the West from ancient times to the present. Focus on the influence of reading and writing on social, cultural, and intellectual life. Methodologies, theories, and sources for study of book and print culture history.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 651 – CATALOGING AND CLASSIFICATION**

3 credits.

Basic cataloging and classification principles and suitable techniques. Includes descriptive cataloging, selected entry headings, Sears subject headings, Dewey Decimal Classification, book numbers, and cataloging with supplied copy including OCLC editing.

**Requisites:** L I S 602

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 652 – XML AND LINKED DATA**

3 credits.

Introduces the technical underpinnings of XML and linked data (RDF) as used in information agencies, sufficient for students to learn, use, and leverage newly-encountered markup and metadata languages.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **L I S 654 – INFORMATION SERVICES MANAGEMENT**

3 credits.

Survey of concepts and skills necessary to perform in an information services organization. Service needs assessment, goal and objective setting, staffing, budgeting and evaluation.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 655 – COLLECTION MANAGEMENT**

3 credits.

Collection development designed to teach professional skills in selection and control of collections. Examines large societal forces affecting the ways librarians have traditionally built collections and contemporary changes in access and ownership.

**Requisites:** L I S 601 and 602 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 658 – PUBLISHING, KNOWLEDGE INSTITUTIONS AND SOCIETY: E-REVOLUTIONS?**

3 credits.

Examines change in the publishing industries in the U.S. and globally. Students gain knowledge of current trends, processes, and standards in trade and scholarly publishing. Students critically examine changes in stakeholders, workflows and financial arrangements in the publishing industries. Includes an examination of copyright law, licensing practices, and open knowledge practices.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

### **L I S 661 – INFORMATION ETHICS AND POLICY**

3 credits.

Overview of modern ethical theories and how they inform information agency policies and practices; examines selected policy issues relating to information and communications; includes topics such as intellectual property, privacy, censorship, equity of access.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S/LEGAL ST 663 – INTRODUCTION TO CYBERLAW**

3 credits.

The emphasis is on critical thinking about a broad variety of legal and policy problems that arise because of ever-changing information and communication technologies.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 665 – TOPICS IN RACE AND ETHNICITY IN THE INFORMATION SOCIETY**

3 credits.

Discusses issues in the provision of information services in a multiethnic and multilingual society. It also discusses the role of information institutions in promoting and preserving ethnic heritage.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**L I S 668 – DIGITAL CURATION AND COLLECTIONS**

3 credits.

Core concepts and new developments in digital curation, preservation and digital collections. Topics include: digitization of various media; digital preservation; media archeology; basics of research data management; digital collection technologies and workflows; intellectual-property issues; metadata as applied in digital collections; digital collections planning and evaluation; trusted digital repositories; funding of digital collection projects and sustainability.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/JOURN 677 – CONCEPTS AND TOOLS FOR DATA ANALYSIS AND VISUALIZATION**

3 credits.

An introduction to information and data visualization: introduction to major concepts, instruction in specific tools for data analysis and visualization, and application of skills in a final project.

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S 678 – PRESERVATION AND CONSERVATION OF LIBRARY AND ARCHIVES MATERIALS**

3 credits.

Basic concepts, principles, and approaches to protection and care of library and archives material, including nature and structure of paper- and plastic-based materials, deterioration, preservation management, disaster prevention, reformatting, and repair.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/COM ARTS 705 – INTRODUCTORY ANALYTICS FOR DECISION MAKING**

3 credits.

Introduces key stages in the processes of gathering and analyzing data for decision making, including tasks, methods, and tools used at each stage. Topics include developing the research question from organizational goals, choosing appropriate data collection methods, sampling, basics of measurement and question design, managing and visualizing data, descriptive statistics and basic inferential statistics such as correlations, regressions, and ANOVA.

**Requisites:** Graduate/professional standing or Declared in Analytics for Decision Making capstone certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 706 – DATA MINING PLANNING AND MANAGEMENT**

3 credits.

Prepares students to plan, manage and assess a data mining project in light of organizational strategic goals. Introduces stages of a data mining project, data mining project evaluation frameworks, and principles of data ethics related to data mining. Learn and apply introductory data mining tools and techniques for data clustering, dividing data into classes, making predictions and identifying networks.

**Requisites:** COM ARTS/L I S/COM ARTS 705

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**L I S 707 – DATA VISUALIZATION AND COMMUNICATION FOR DECISION MAKING**

3 credits.

Introduces key concepts in data visualization and communication including how and why visualization can be an effective tool for summarizing, analyzing and communicating about data, and limitations and challenges of using visualization techniques. Students will use contemporary software to develop visualization dashboards and presentations as well as plan appropriate types of visualization(s) based on source data, audience, and goals, evaluate visualizations for effectiveness and bias.

**Requisites:** Graduate/professional standing or Declared in Analytics for Decision Making capstone certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 711 – DATA MANAGEMENT FOR INFORMATION PROFESSIONALS**

3 credits.

Preparation to effectively and ethically manage, organize and protect the data in organizational settings. Covers major topics of data management addressed by the Certified Data Management Professional certification. Assess, construct and implement workflows, organizational policies and data architecture to improve data quality and security. Learn to clean and organize data for effective retrieval and use. Learn tools and techniques to support data interoperability, and gain understanding of contemporary data management ethical and policy issues.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **L I S 712 – THE PUBLIC LIBRARY**

3 credits.

Library service based on knowledge of structure and government, personnel, resources, legislation, building, management and planning, public relations and marketing.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 722 – COLLEGE AND UNIVERSITY LIBRARIES**

3 credits.

Place of the library and librarian in the instructional program; special units of study devoted to administration of the library, budgets, buildings, departmental libraries and cooperative ventures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 732 – STRATEGIC INFORMATION SERVICES**

3 credits.

Developing, managing and evaluating information services to corporate, government, research, small business, and community organizations. Overviews of knowledge management, business intelligence, industry analysis, information brokering. Gain skills in information service entrepreneurship and marketing information services. Overview of changes within the profession and networking within the professional community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **L I S/HISTORY 734 – INTRODUCTION TO ARCHIVES AND RECORDS MANAGEMENT**

3 credits.

An introduction to the archives profession and basic theory and practice of archives and records administration, including the uses of primary sources in research, appraisal, access, and preservation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 751 – DATABASE DESIGN FOR INFORMATION PROFESSIONALS**

3 credits.

Introduction to contemporary database management systems, the design process employed when implementing databases to solve data and information management problems, developing queries and scripts, and other issues in employing databases to solve organizational information and data challenges.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **L I S 755 – ELECTRONIC RESOURCE MANAGEMENT & LICENSING**

3 credits.

Management, policy and technology issues associated with licensed digital library resources such as e-journals, e-books, full text and citation databases, digital audio and video collections, and e-references resources. Includes a significant copyright and licensing component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **L I S 768 – DIGITAL HUMANITIES ANALYTICS**

3 credits.

Learn and apply introductory technology-related concepts and skills to plan, implement and assess data-driven projects in the humanities, social sciences and other fields. Topics include identifying relevant existing digitized materials, web scraping, text encoding, topic modeling, mapping, social network analysis and other approaches for collecting, analyzing and visualizing data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 772 – LIBRARY SERVICES TO CHILDREN AND YOUNG ADULTS**

3 credits.

The theory and structure of public library service to children and young people, its function in the community, and techniques of administration. Seminar and field work.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S/CURRIC/ED PSYCH 803 – COMPUTATIONAL RESEARCH METHODS**

3 credits.

Provides a broad overview of ways of formulating and investigating novel questions with tools from educational data mining and learning analytics including social network analysis, natural language processing, Markov modeling, Bayesian inference, and agent-based modeling.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 818 – ARCHIVES ACCESSIONING AND APPRAISAL**

3 credits.

Theories and principles behind archival decisions to acquire records and designate them as worthy of long-term retention in an archive. Emphasis on understanding archival views about society, the role of the archivist, and the attribution of value to archival material.

**Requisites:** HISTORY/L I S/HISTORY 734 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**L I S 820 – TOPICS IN COMMUNITY ENGAGEMENT**

1-3 credits.

Provides a practical experience for students to work in communities with literacy and other information needs. Examples of community work include designing and implementing literacy programs for school-aged children and organizing book and magazine collections in after-school facilities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**L I S 822 – INFORMATION USE AND USERS**

3 credits.

Survey of information needs, information seeking behavior, and information use by people in their various roles, situations, and contexts. Methods that are used to study information needs, uses, and information seeking behavior, including community analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**L I S 826 – FIELD PROJECT IN LIBRARY AND INFORMATION LITERACY INSTRUCTION**

3 credits.

Guided practice in the development and implementation of information literacy curriculum at the university level. Participants will assist campus teaching librarians with the Communication Requirement A courses and perform other teaching related tasks at assigned site.

**Requisites:** L I S 601 and 602 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**L I S 839 – SPECIAL COLLECTIONS**

1-3 credits.

A topical course focusing on a special subject (art, law, music, health sciences) or format (maps, microforms, rare books, iconographic materials). Issues related to collection development, acquisitions, reference, indexing and management.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**L I S 855 – TOPICS IN INFORMATION AGENCY MANAGEMENT**

1-3 credits.

Critical examination of selected management techniques in the areas of materials control, physical plant operations, personnel programs, budget preparation and statistical reporting. May also focus on a particular type of information agency; e.g., data analysis centers, research libraries, or public libraries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**L I S 875 – TOPICS IN INFORMATION PROCESSING AND RETRIEVAL**

1-3 credits.

Current issues in technologies for information processing and retrieval in libraries and information agencies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**L I S 879 – DIGITAL LIBRARIES**

3 credits.

Technologies and other related topics/issues in developing and maintaining digital libraries. Covers digitization and organization of information, user-centered systems design and evaluation, public services, funding, and so on. Project-based course.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**L I S 910 – SMR-RESEARCH DESIGN & METHODOLOGY FOR LIBRARY & INFORMATION STUDIES**

3 credits.

Examines key issues in research design, including how to formulate research questions and shape scholarly research to make valid descriptive and causal inferences. Analysis and evaluation of research designed and conducted with different theoretical frameworks and methodologies; guided proposal preparation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**L I S 925 – PROFESSIONAL WRITING AND READING (PWR) SEMINAR**

1 credit.

Provides professional development for doctoral-level researchers. Includes presentations by guest speakers and/or faculty members, writing workshops, reflection assignments and student presentations.

**Requisites:** Declared in Library and Information Studies PhD program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 6 number of completions

**Last Taught:** Spring 2023

**L I S 931 – SEMINAR IN INFORMATION POLICY, MANAGEMENT AND INSTITUTIONS**

3 credits.

Survey of research and theorizing of: information policy and law, the management of information within and between organizations - including information technology and information labor, and investigation of traditional and new institutions in the information society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**L I S 940 – SEMINAR IN INFORMATION USE AND USERS IN CONTEXT**

3 credits.

Exploration of information needs, information seeking behavior, and information use by people in various roles, situations, and contexts that go beyond libraries. It includes exploring factors that influence a user's information needs and behavior.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**L I S 950 – SEMINAR IN LIS FOUNDATIONS: HISTORIES, PHILOSOPHIES AND DEBATES**

3 credits.

An in-depth examination of some aspect(s) of the historical and philosophical foundations of LIS as it has been transformed through time and space, within the broader cultural context.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**L I S 975 – SEMINAR IN INFORMATION ORGANIZATION AND ACCESS**

3 credits.

Critical examination of technical and non-technical aspects and cognitive/socio-cultural processes and implications of systems and models of information organization, retrieval and transfer. Introduces different research approaches and topic areas, including relevance, search behavior, knowledge representation, and systems design and evaluation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**L I S 990 – RESEARCH AND THESIS**

1-9 credits.

Dissertation credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**L I S 999 – INDEPENDENT READING AND RESEARCH**

1-4 credits.

Concentrated work on a subject or problem of the student's need or interest; students must submit a written report, paper, or other product covering the work accomplished.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## LIFE SCIENCES COMMUNICATION (LSC)

**LSC 1 – COOPERATIVE EDUCATION/CO-OP IN LIFE SCIENCES COMMUNICATION**

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working, and may not receive additional credit in another course for the same work.

**Requisites:** LSC 250 and senior standing or graduate/professional standing**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**LSC 100 – SCIENCE AND STORYTELLING**

3 credits.

Fundamentals of effective written and spoken communication. Develops skills in gathering and evaluating information, writing research papers and other documents, and preparing and delivering oral presentations.

**Requisites:** Students required to take the MSN ESLAT cannot enroll until the ESL 118 requirement is satisfied**Course Designation:** Gen Ed - Communication Part A  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 111 – SCIENCE AND TECHNOLOGY NEWSWRITING**

3 credits.

Principles of journalism and essentials of journalistic writing applied to agriculture, natural resources, science, health and related topics.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Spring 2020**LSC 155 – FIRST-YEAR SEMINAR IN SCIENCE COMMUNICATION**

1 credit.

Introduces students to the field of science communication and the importance of effectively communicating about controversial and complex science and technology topics. Engage with science communication faculty and staff, campus resources, and opportunities to explore academic and career goals. Appropriate for students across a wide variety of disciplines. Examples of topics that may be discussed in the course include climate change, artificial intelligence, gene editing, and public health.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 212 – INTRODUCTION TO SCIENTIFIC COMMUNICATION**

3 credits.

Writing effective science digests, proposals, newsletters, and trade magazine articles for agriculture, natural resources, health and science-related topics.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 250 – RESEARCH METHODS IN THE COMMUNICATION INDUSTRY**

3 credits.

Introduction to research methods in the communication industry. Overview of all stages of the research process and of translating data into reports for strategic communication recommendations for clients, ranging from industry to policymakers.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**LSC 251 – SCIENCE, MEDIA AND SOCIETY**

3 credits.

Introduction to communication at the intersection of science, politics and society; overview of the theoretical foundations of science communication and their relevance for societal debates about science and emerging technologies across different parts of the world.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 270 – MARKETING COMMUNICATION FOR THE SCIENCES**

3 credits.

Explores marketing, promotion, and strategic communication specific to the consumer marketplace. Analyze communication strategies for science products and industries synthesized from business goals and objectives to specific audiences. Coursework includes a variety of readings from a class textbook as well as peer-reviewed papers published in life science, marketing, communication, and general business journals.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area encompassing Life Sciences Communication. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**LSC 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area encompassing Life Sciences Communication. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2014**LSC 314 – INTRODUCTION TO DIGITAL VIDEO PRODUCTION**

3 credits.

Principles and techniques of digital documentary and informational video production. Video styles and subject matter treatment analyzed. Information gathering, videography, scripting, producing, and editing techniques.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 332 – PRINT AND ELECTRONIC MEDIA DESIGN**

3 credits.

Principles and techniques of effective layout with desktop publishing software for specialized print and electronic publications.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 340 – MISINFORMATION, FAKE NEWS, AND CORRECTING FALSE BELIEFS ABOUT SCIENCE**

3 credits.

Explores the spread of misinformation and its effects on scientific topics. Covers why people believe fake news, the role of social media in propagating fake news, and the societal impacts. Practice applying theoretical ideas and making evidence-based recommendations for correcting examples of misinformation in science, media, and industry.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Breadth – Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 350 – VISUALIZING SCIENCE AND TECHNOLOGY**

3 credits.

Introduction to the basic principles in the visual communication of science information. Principles of design, perception, cognition as well as the use of technologies in the representation of science in the mass media will be explored through illustrated lectures and written critique.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 360 – INFORMATION RADIO**

3 credits.

Radio writing, editing, information gathering, planning, voicing, and evaluation using digital recording and editing equipment. Students write, produce and voice newscasts, advertisements, public service announcements, interviews, and features.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed – Communication Part B**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**LSC 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in LSC and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LSC 400 – STUDY ABROAD IN LIFE SCIENCES COMMUNICATION**

1-6 credits.

Provides an area equivalency for courses taken on UW-Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**LSC 430 – COMMUNICATING SCIENCE WITH NARRATIVE**

3 credits.

Understand how narrative theory influences audiences in presenting science; analyze the role of metaphor in communicating science; integrate effective writing structures for explaining complex science; learn writing and editing skills for best practices in science communication.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LSC 432 – SOCIAL MEDIA FOR THE LIFE SCIENCES**

3 credits.

Explores social media communication and tools specific to the life sciences, and will be centered on building the student's social media presence. Coursework will include a variety of readings from peer-reviewed papers, marketing, business and communication journals.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 435 – BRAND STRATEGY FOR THE SCIENCES**

3 credits.

Explores strategic marketing, branding, and communication planning specific to science, technology, and environmental industries. Examines the sociological and psychological processes shaping audiences' perceptions of various brands, and discusses how to apply various strategies and frameworks to reinforce these perceptions and guide marketing and communication efforts. Combines portfolio-building writing as well as in-class presentations and discussion on contemporary marketing, branding issues, including strategic marketing plans.

**Requisites:** LSC 270, GEN BUS 311, MARKETNG 300, CNSR SCI 477, or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 440 – DIGITAL MEDIA AND SCIENCE COMMUNICATION**

3 credits.

Explores how to navigate the complex world of digital and networked communication tools with an eye toward a wide variety of careers in communication. Understand and evaluate social implications of digital media, informed by the most recent scholarship and classical theories. Attention is given to implications for public engagement with controversial scientific issues.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC/AMER IND 444 – NATIVE AMERICAN ENVIRONMENTAL ISSUES AND THE MEDIA**

3 credits.

Explores public understanding and media coverage of Native American environmental issues including treaty rights, air and water quality, land-into-trust, and sacred sites. Analysis of organizational and structural constraints of media coverage relating to issues of sovereignty and intergovernmental relationships.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2017

**LSC 450 – DOCUMENTARY PHOTOGRAPHY FOR THE SCIENCES**

3 credits.

Trains students in visual storytelling and how to think photographically for communicating science, health and the environment. Students study the contributions of social documentary photography while assignments create a portfolio of documentary photography, and final team projects create effective still-image video stories that employ intellectual property rights.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LSC 460 – SOCIAL MEDIA ANALYTICS**

3 credits.

Provides an introduction and practical guide to understanding, collecting, and analyzing data from social media to evaluate their impact on consumer choices, human interaction, and public opinion of scientific issues and industries. Prepares students to apply metrics from current social media platforms (e.g. Instagram, Youtube, Twitter, etc.) to develop strategic communication recommendations for clients, ranging from industry to policymakers.

**Requisites:** Satisfied Quantitative Reasoning A requirement or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LSC 477 – NAMA PROJECT: AGRI-MARKETING STRATEGY AND IMPLEMENTATION**

2 credits.

A full-scale marketing campaign culminating in a national student competition for National Agricultural Marketing Association during their annual convention held every spring. Development of campaign plan includes brand identity, associated visuals, market research, strategic communication, competitive analysis, presentation skills, and learning how to work as a team toward a common goal.

**Requisites:** None

**Repeatable for Credit:** Yes, for 8 number of completions

**Last Taught:** Spring 2023

**LSC 515 – SOCIAL MARKETING CAMPAIGNS IN SCIENCE, HEALTH AND THE ENVIRONMENT**

3 credits.

Design, production and evaluation of communication programs aimed at informing and educating the public about agricultural, environmental, science, health and human ecology issues.

**Requisites:** Senior standing, declared in Life Sciences Communication, LSC 250 and 251

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LSC 532 – WEB DESIGN FOR THE SCIENCES**

3 credits.

Provides an opportunity to design websites that focus on agricultural, life and social sciences. It covers characteristics of web users, science information goals for websites, needs assessment, search strategies, formative evaluations, legal issues.

**Requisites:** Satisfied Communications A requirement or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LSC 560 – SCIENTIFIC WRITING**

3 credits.

Focuses on scientific writing techniques that can be applied to academic papers, scientific journals, grant proposals, and other written and oral professional work in science and technology related fields.

**Requisites:** Junior standing

**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LSC 561 – WRITING SCIENCE FOR THE PUBLIC**

3 credits.

Focuses on science writing concepts and techniques that can be used to communicate purposefully and effectively with public audiences about science, research, and technology.

**Requisites:** Junior standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LSC 614 – ADVANCED VIDEO PRODUCTION**

3 credits.

An advanced digital video production course. Students will receive advanced instruction in producing, videography, scripting, and editing digital video.

**Requisites:** LSC 314 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**LSC/COM ARTS/JOURN 617 – HEALTH COMMUNICATION IN THE INFORMATION AGE**

3 credits.

Examines the role of communication in health, how the revolution in information technology has affected health communication, and the assumptions about health information and communication that drive current efforts to use technologies.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 625 – RISK COMMUNICATION**

3 credits.

Examines risk as a central concept in the communication process. Since risk is intrinsically an interdisciplinary concept, the examination will rely on literature from a wide range of disciplines and perspectives, such as communication, psychology, sociology and formal risk analysis. Case studies will be drawn from a wide range of global issues and cultural contexts, including environmental, technological or health risks; food safety risks; international military crisis or threats of terrorism; and natural disasters.

**Requisites:** Junior standing and (LSC 250 or 251); or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 640 – CASE STUDIES IN THE COMMUNICATION OF SCIENCE AND TECHNOLOGY**

3 credits.

Examination of social scientific research addressing characteristics of science, public understanding of science, science news, and relationships between scientists and journalists. Application of this knowledge to several case studies examining the function of communication in specific scientific or technical contexts.

**Requisites:** Senior standing, declared in Life Sciences Communication, LSC 250 and 251**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 660 – DATA ANALYSIS IN COMMUNICATIONS RESEARCH**

3 credits.

How to use chi-square, analysis of variance, simple and multiple correlation and regression analysis, and various nonparametric tests in communication research.

**Requisites:** LSC 250 and senior standing or graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 681 – SENIOR HONORS THESIS**

2–4 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC 682 – SENIOR HONORS THESIS**

2–4 credits.

Second semester of individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 691 – SENIOR THESIS**

1–3 credits.

Individual study for undergraduate students completing a thesis in the area of science communication, as arranged with a research faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**LSC 692 – SENIOR THESIS**

1–3 credits.

Second semester of individual study for undergraduate students completing a thesis in the area of science communication, as arranged with a research faculty member.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**LSC 699 – SPECIAL PROBLEMS**

1–4 credits.

Individual advanced work in an area of Life Sciences Communication under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022



**LSC 700 – COLLOQUIUM IN LIFE SCIENCES COMMUNICATION**

1 credit.

Gives graduate students exposure to the many faculty across the UW campus who work on communication issues within their own fields. Weekly speakers represent diverse departments and other units; many will focus on science, health technology and related issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LSC 720 – INTRODUCTION TO COMMUNICATION THEORY AND RESEARCH**

3 credits.

Introduction of concepts fundamental to conduct of social scientific research, overview of history and structure of field of communication, survey of major theoretical perspectives on mass communication at both micro and macro levels, with treatment of micro-macro and mass-interpersonal integration.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**LSC/JOURN 811 – CONCEPTUALIZATION AND DESIGN OF MASS COMMUNICATION RESEARCH**

2-3 credits.

Assists students in turning research questions into substantive research designs with understanding of the concepts involved. For most students, the final product will be a well-developed thesis or dissertation proposal.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**LSC/ENVIR ST/JOURN 823 – SCIENCE AND ENVIRONMENT COMMUNICATION**

3 credits.

Tracks the evolution of mass media coverage of science and the environment. Emphasis on how journalists utilize evidence, the influence of scientific and journalistic norms on stories, and the effects of mass media on science and environment messages to the public.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**LSC/JOURN 825 – ETHICS AND COMMUNICATION**

3 credits.

Explores critical media ethics questions shaped by practices in a disruptive digital environment.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**LSC/JOURN 826 – JOURNALISM THEORY**

3 credits.

Focus on the content and purposes of journalism, explores cultural values associated with journalism, relationships between journalism and other institutions, and current issues facing journalists at a time when the profession faces many challenges.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC/COM ARTS/JOURN 831 – PSYCHOLOGY OF ENTERTAINMENT MEDIA**

3 credits.

Provides an an in-depth look into entertainment media, including its effects on individuals, social groups, and society. The focus on entertainment content is across platforms - from "mass" to social media. Emphasis will be paid to psychological, individual-level effects.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**LSC/JOURN 833 – TECHNOLOGY AND SOCIETY**

3 credits.

Considers the effects of new communication technologies on everyday life and political mobilization.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**LSC/JOURN 834 – COMMUNICATION AND SOCIAL THEORY**

3 credits.

Looks at key questions in social theory from the 20th century and provides concepts and analytical frameworks to think carefully about how networks work and what they do at different levels of society.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

**LSC 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LSC 902 – PUBLIC OPINION OF LIFE SCIENCE ISSUES**

3 credits.

Advanced seminar on public opinion surrounding the science issues and science policy. Examines the intersection of public opinion, science, and politics; issues related to public opinion measurement; and the importance of public opinion for different aspects of life science communication.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**LSC 990 – RESEARCH**

1-12 credits.

Independent research in preparation of a graduate thesis under supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LSC 999 – INDEPENDENT RESEARCH**

1-3 credits.

Independent research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LINGUISTICS (LINGUIS)****LINGUIS 101 – HUMAN LANGUAGE**

3 credits.

Elementary theory and practical work in phonetics, phonology, morphology, and syntax, with attention to formal grammar.

**Requisites:** Not open to students with credit for LINGUIS/ANTHRO 301.**Course Designation:** Breadth - Humanities Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LINGUIS/ANTHRO/FOLKLORE/INTL ST 211 – GLOBAL LANGUAGE ISSUES**

3 credits.

Focuses on language and its culture, example topics include: extinction and revival, language and nationhood, how widely and deeply languages differ, language and worldview, writing systems and literacy, language discrimination and inequality.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LINGUIS 237 – LANGUAGE IN WISCONSIN**

3 credits.

For millennia, the place we now call Wisconsin has been home to countless languages and dialects: Indigenous languages, immigrant/refugee languages and English. How and when did people learn English and when and why did they begin to speak only English? How has English developed in distinctive ways here? Do hands-on, original research to answer these and related questions about English and other languages past and present in Wisconsin. Examine social and historical issues and issues of linguistic structure, drawing on local histories, archival data, Census records and audio recordings, with opportunities to do fieldwork in communities across the state and the region.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LINGUIS 299 – DIRECTED STUDY**

1-4 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**LINGUIS/ANTHRO 301 – INTRODUCTION TO LINGUISTICS: DESCRIPTIVE AND THEORETICAL**

3 credits.

Elementary theory and practical work in phonetics, phonology, morphology, and syntax, with attention to formal grammar.

**Requisites:** Graduate/professional standing. Not open to students with credit for LINGUIS 101.**Course Designation:** Breadth - Humanities Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**LINGUIS 303 – HISTORICAL LINGUISTICS**

3 credits.

Understanding language change; relation of variation and change to formal properties of human language; consideration of linguistic typology, basic concepts and methods of diachronic analysis. Topics include: language classification and reconstruction; language and social identity, geography, and power; language contact; registers; writing systems.

**Requisites:** (LINGUIS 101 or 301), ENGL 417, ASIAN 631, GERMAN 650, SPANISH/FRENCH/ITALIAN/PORTUG/FRENCH/ITALIAN/SPANISH 429, or SCAND ST 415

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LINGUIS 306 – GENERAL PHONETICS**

3 credits.

Theory of articulatory phonetics; practice in recognition, reproduction, and transcription of speech sounds and features in various languages.

**Requisites:** LINGUIS 101 or 301

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**LINGUIS 309 – GRAMMATICAL VARIABILITY OF LANGUAGE**

3 credits.

Introduction to theories of variation among world languages, focusing on syntactic phenomena.

**Requisites:** LINGUIS 101 or 301

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LINGUIS 310 – PHONOLOGY**

3 credits.

Analysis and formal statement of phonological systems; problems and methods of phonological theory.

**Requisites:** LINGUIS 101 or 301

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LINGUIS 322 – MORPHOLOGY**

3 credits.

Morphological characteristics of the world's languages. Introduction to theoretical approaches to morphology. Interaction between morphology and syntax; morphology and phonology.

**Requisites:** LINGUIS 101 or 301

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LINGUIS 330 – SYNTAX**

3 credits.

Grammatical theory; types of elements and processes usable in syntactic description of various sorts.

**Requisites:** LINGUIS 101 or 301

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LINGUIS 340 – SEMANTICS**

3 credits.

Meaning in natural languages, relationship between syntax and semantics, compositional semantics.

**Requisites:** LINGUIS 330

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**LINGUIS 351 – AMERICAN SIGN LANGUAGE 1**

4 credits.

An introduction to elementary skills in production and comprehension of American Sign Language (ASL), with a communicative focus. Basics of ASL vocabulary, structure, and grammar, and the North American manual alphabet. Develop basic conversational abilities, culturally appropriate behaviors, and learn about the culture and history of Deaf communities.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**LINGUIS/AMER IND 371 – SURVEY OF NORTH AMERICAN INDIAN LANGUAGES**

3 credits.

Overview of native languages of North America, including topics such as history, distribution, diversity, government policy, language endangerment, elaboration of cultural domains, language and worldview, speech styles, language structure (phonology, morphology, grammatical categories), performance (narrative, song), writing systems.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LINGUIS 373 – TOPICS IN LINGUISTICS**

3 credits.

Study of a particular topic in linguistics.

**Requisites:** LINGUIS 101 or 301**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LINGUIS 426 – FIELD METHODS I**

3 credits.

Collection and analysis of phonetic, phonological, and morphological data from a particular language, using one or more speakers as consultants.

**Requisites:** LINGUIS 310**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**LINGUIS 427 – FIELD METHODS II**

3 credits.

Collection and analysis of morphological, syntactic, and semantic data from a particular language, using one or more speakers as consultants.

**Requisites:** LINGUIS 310 and (322 or 330)**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**LINGUIS/ANTHRO 430 – LANGUAGE AND CULTURE**

3-4 credits.

The relationship of language as a communication system to the culture transmitted by it. Principle problems in the interrelations of language and nonlinguistic human behavior.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LINGUIS 481 – JUNIOR HONORS TUTORIAL**

1 credit.

Mentored individual research for those pursuing Honors in the Major.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LINGUIS 482 – JUNIOR HONORS TUTORIAL**

1 credit.

Mentored individual research for those pursuing Honors in the Major.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LINGUIS 510 – PHONOLOGICAL THEORIES**

3 credits.

Theories of phonology, and advanced phonological description.

**Requisites:** LINGUIS 310**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LINGUIS 522 – ADVANCED MORPHOLOGY**

3 credits.

Advanced morphological theory.

**Requisites:** LINGUIS 322**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**LINGUIS 530 – SYNTACTIC THEORIES**

3 credits.

Theories of syntax, and syntactic description. The relation of syntax to semantics, and other aspects of linguistic theory.

**Requisites:** LINGUIS 330

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LINGUIS 571 – STRUCTURE OF A LANGUAGE**

3 credits.

In-depth study of all components of the grammar of a language.

**Requisites:** LINGUIS 310 and 330

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**LINGUIS 583 – SENIOR HONORS TUTORIAL**

1 credit.

Mentored individual research for those pursuing Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**LINGUIS 610 – TOPICS IN PHONOLOGICAL THEORY**

3 credits.

In-depth examination of a single phonological theory or a single area of recent phonological research.

**Requisites:** LINGUIS 510 or declared in Linguistics MA or PHD

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**LINGUIS 681 – HONORS SEMINAR-SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LINGUIS 682 – HONORS SEMINAR-SENIOR THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LINGUIS 690 – CAPSTONE IN LINGUISTICS**

3 credits.

In-depth exploration of a particular topic in linguistics. Training in data collection methodologies. Experience gathering, organizing, and analyzing linguistic data as part of a supervised research project.

**Requisites:** LINGUIS 310, 322, and 330

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LINGUIS 699 – INDEPENDENT READING**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**LINGUIS 800 – RESEARCH METHODS AND MATERIALS**

3 credits.

Professionalization activities for linguists, including writing and publishing, submitting abstracts to conferences, and creating CVs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**LINGUIS 977 – SEMINAR**

2-3 credits.

Critical examination of selected issues in linguistics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### LINGUIS 990 – THESIS

1-12 credits.

Research in connection with the doctoral thesis.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LINGUIS 999 – INDEPENDENT READING

1-12 credits.

Mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## LITERATURE IN TRANSLATION (LITTRANS)

### LITTRANS 201 – SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION I

3 credits.

Examines the era of 19th-century Russian prose fiction, roughly 1830-1900, from Aleksandr Pushkin to Anton Chekhov.

**Requisites:** Not open to students with credit for LITTRANS 203

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS 202 – SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION II

3 credits.

Examines Russian prose fiction, Anton Chekhov to the end of the 20th century.

**Requisites:** Not open to students with credit for LITTRANS 204

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LITTRANS 203 – SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION I

4 credits.

Examines the era of 19th-century Russian prose fiction, roughly 1830-1900, from Aleksandr Pushkin to Anton Chekhov. More writing intensive than LITTRANS 201.

**Requisites:** Not open to students with credit for LITTRANS 201

**Course Designation:** Gen Ed - Communication Part B Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS 204 – SURVEY OF 19TH AND 20TH CENTURY RUSSIAN LITERATURE IN TRANSLATION II

4 credits.

Examines Russian prose fiction, Anton Chekhov to the end of the 20th century. More writing intensive than LITTRANS 202.

**Requisites:** Not open to students with credit for LITTRANS 202

**Course Designation:** Gen Ed - Communication Part B Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LITTRANS/GEN&WS 205 – WOMEN IN RUSSIAN LITERATURE IN TRANSLATION

3-4 credits.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### LITTRANS 207 – SLAVIC SCIENCE FICTION THROUGH LITERATURE AND FILM

3 credits.

Explore the rich tradition of Slavic contributions to Science Fiction (SF).

Survey early and contemporary works in the Czech, Polish, and Russian contexts, most of which are little known in the US but are nonetheless fundamental to SF as a world genre. Alongside reading these works, discuss and analyze film adaptations that have, in some cases, become more famous than written texts themselves.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### LITTRANS 208 – THE WRITINGS OF VACLAV HAVEL: CRITIQUE OF MODERN SOCIETY

3 credits.

Survey and critical analysis of the writings of Vaclav Havel from the 1960's through the 1990's: plays, philosophical and dissident essays, selected speeches as president.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### LITTRANS 209 – MASTERPIECES OF FRENCH LITERATURE AND CULTURE

3-4 credits.

A study of representative masterpieces of French and Francophone literature drawn from at least four different centuries. Emphasis on the interpretation of texts, important themes, and the ways literature expresses psychological and sociocultural realities. May cover topics such as: tragedies by Jean Racine, comedies by Moliere, novels by Pierre Choderlos de Laclos, Honore de Balzac, Guy de Maupassant and Maryse Conde, and stories by Gustave Flaubert and Albert Camus.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### LITTRANS 213 – LOVE AND SEX IN ITALIAN COMEDY

3-4 credits.

Explore Italian comedy and dramatic literature across the centuries through close reading and discussion of selected plays, from its Roman origins to contemporary examples. Read and discuss texts representative of the major comedic modes (e.g. erudite, improvised, etc.), paying close attention to language and structure, genre debates, character typologies, performance history, and the cultural-historical contexts that informed playwrights. Aims are cultivating a deeper understanding of Italian sensibilities and cultural attitudes regarding humor and satire, love and sex, tragedy within comedy, history, gender politics, public/private space, social customs, class, and other issues.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### LITTRANS 215 – POLISH LITERATURE IN TRANSLATION: 14TH TO THE MID-19TH CENTURY

3 credits.

The Beginnings, Baroque, Enlightenment and Romanticism.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### LITTRANS 218 – POLISH LITERATURE IN TRANSLATION: LATE 19TH AND 20TH CENTURIES

3 credits.

A survey of the main currents in Polish literature since 1863.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### LITTRANS 220 – CHEKHOV: THE DRAMA OF MODERN LIFE

3 credits.

Russian culture is one where literature has always played a central role in the nation's self-definitions, but Chekhov's enduring popularity around the globe is evidence of his universal appeal and relevance.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LITTRANS 221 – RUSSIA'S GREATEST ENIGMA: NIKOLAI GOGOL

3 credits.

Despite the comparisons to Poe and Kafka or Gogol's undeniable influence on Dostoevsky and Bulgakov, one thing is certain - his world of laughter and tears is unlike that of any other writer.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LITTRANS 222 – DOSTOEVSKY IN TRANSLATION**

3–4 credits.

Dostoevsky's works are direct encounters with the "accursed questions" of life, love, evil, violence, sex, death and the other usual suspects; main focus will be on the individual reader's close encounter with the aesthetics and ethics of these works.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS/ENGL 223 – VLADIMIR NABOKOV: RUSSIAN AND AMERICAN WRITINGS**

3 credits.

The major novels of Vladimir Nabokov studied in the context of Russian and American literatures. Nabokov as a quintessential artist in exile, whose work explores loss of language, country and home.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS 224 – TOLSTOY IN TRANSLATION**

3–4 credits.

What were Tolstoy's objections to sexuality and political reform? What is moral and beautiful? How does civilization and education relate to nature? What does death say about life? Discussion of Tolstoy's masterpieces alongside some of his nonfictional manifestoes.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LITTRANS 226 – INTRODUCTION TO LUSO-AFRO-BRAZILIAN LITERATURE**

3 credits.

Introduction to the cultural and literary practices of the Portuguese-speaking world. Readings include novels, short stories, and poetry from Portugal, Brazil, and Lusophone Africa.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed – Communication Part B Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS/CLASSICS/JEWISH/RELIG ST 227 – INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)**

4 credits.

Introduction to the text, development, history, and social context of the Hebrew Bible/Old Testament. Covers the Torah (Pentateuch), Neviim (Former and Latter Prophets), and Ketuvim (Writings), and provides a brief introduction to early Jewish literature (Pseudepigrapha/Apocrypha). Discusses various methods of analysis and theories of composition. Addresses major theological claims made of the text by Jewish and Christian communities. Explores contextualized interpretations in the ancient and modern day.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS 229 – REPRESENTATION OF THE JEW IN EASTERN EUROPEAN CULTURES**

3 credits.

The image and representation of the "Jew" and Jews in the literatures and cultures of the Slavic countries of Eastern Europe, including Russia, Poland, Serbia, Croatia, and Bosnia. Both pre- and post-Holocaust texts will be read and critically examined.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**LITTRANS 231 – MANGA**

3 credits.

Surveys the manga (Japanese comicbook) from precursors in premodern woodblock-printed booklets to contemporary manifestations in subgenres like gekiga, mecha, shonen, and shojo. Draws on critical writings on literature, popular culture, and visual culture.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**LITTRANS 232 – ANIME**

3 credits.

Surveys anime (Japanese animation) from 1930s shorts through contemporary feature-length, experimental, and televised serial-form productions. Draws on critical writings on postmodernism, digital cinema, and visual culture.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

### LITTRANS 233 – RUSSIAN LIFE AND CULTURE THROUGH LITERATURE AND ART (TO 1917)

3-4 credits.

Prerevolutionary Russian visual arts, architecture, music and cinema; provides an inside view of life in prerevolutionary Russia with the help of selected readings in Russian literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS 234 – SOVIET LIFE AND CULTURE THROUGH LITERATURE AND ART (FROM 1917)

3-4 credits.

Postrevolutionary Russian and Soviet visual arts, architecture, music and cinema; provides an inside view of life under socialism with the help of selected readings in Soviet literature.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LITTRANS/MEDIEVAL 235 – THE WORLD OF SAGAS

3 credits.

The Icelandic sagas viewed in their social, cultural, and literary contexts. An introduction to one of the greatest bodies of vernacular literature of the early Middle Ages.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS 236 – BASCOM COURSE-IN TRANSLATION

3 credits.

Develop skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS/SLAVIC 238 – LITERATURE AND REVOLUTION

3 credits.

Take a literary journey from St. Petersburg to Moscow, following the shifting cultural and political currents in Russia from the years preceding the 1917 Revolution to the rise of Stalinism in the 1930s. Topics in translation will include: revolutionary violence and terror, civil war and emigration, Futurism and the birth of Russian avant-garde art, Soviet feminism and the engineering of the "New Man," technological utopias and totalitarian dystopias, literature and early Soviet economic policy.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### LITTRANS 240 – SOVIET LITERATURE IN TRANSLATION

3-4 credits.

A selection of novels, essays, poems, and stories dealing with the Bolshevik Revolution, the Russian Civil War, the Stalin Terror, the Thaw, Perestroika, and the collapse of the Soviet Union.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### LITTRANS 241 – LITERATURES AND CULTURES OF EASTERN EUROPE

3 credits.

Introduction to the literature, culture, and art of Eastern Europe.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**LITTRANS 245 – TOPICS IN SPANISH AMERICAN LITERATURE IN TRANSLATION**

3 credits.

Beginning with the arrival of Spanish colonists in the fifteenth century, Spanish American literature has a rich history of over five centuries, and Spanish American authors were awarded six Nobel prizes between 1945 and 2010. An introduction to key problems, topics, authors, genres, and periods in the history of Spanish American literary practice providing insight into the vast diversity of Spanish American cultures and societies through readings offered in English translation, as well as familiarity with the current critical and theoretical debates on Spanish American literature.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed - Communication Part B Breadth - Literature. Counts toward the Humanities req Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LITTRANS 247 – TOPICS IN SLAVIC LITERATURES IN TRANSLATION**

3 credits.

Exploration of periods, genres, individual writers, themes, problems, ect. in Russian and Eastern European literature.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LITTRANS 249 – LITERATURE IN TRANSLATION: NINETEENTH-CENTURY FRENCH MASTERPIECES**

3 credits.

Read a series of extraordinary narrative texts from nineteenth-and early twentieth-century France.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LITTRANS 252 – SPANISH LITERARY MASTERPIECES IN TRANSLATION**

3 credits.

Major works of Spanish Peninsular literature in prose, drama and poetry.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**LITTRANS/MEDIEVAL/RELIG ST 253 – OF DEMONS AND ANGELS. DANTE'S DIVINE COMEDY**

3 credits.

Have you ever wondered about human nature? What is our place in this world? Through readings, videos, and original images, explore and discuss Dante's answers from one of the greatest world literary classics, his Divine Comedy. From Hell, through Purgatory to Paradise, we will travel together with Dante in a universal tale of the journey of the human soul. Along the way, learn about Dante, his life and his works, development of literary history, historical and socio-political context of medieval Europe, the Mediterranean and the Middle East. Make connections that cross today's geographic and cultural lines in an exploration of literary topics, the history of ideas, and shared history, pondering universal concepts and patterns in the development of civilization that can still be observed today.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LITTRANS 254 – IN TRANSLATION: LIT OF MODERN ITALY-EXISTENTIALISM, FASCISM, RESISTANCE**

3 credits.

Covers Italian history and culture from the Unification (1860) to the 21st century.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS/MEDIEVAL 255 – BLACK DEATH AND MEDIEVAL LIFE THROUGH BOCCACCIO'S DECAMERON**

3 credits.

Have you ever wondered what it was like to live during the Black Death? Were our medieval and early-modern ancestors different from us, or are we challenged with similar problems? What can we learn from their lives? And, if we could, what could we teach each other? Discuss these topics while reading one of the world's greatest literary classics, Giovanni Boccaccio's Decameron, a text that will make us both laugh and cry. Through reading the Decameron, investigate medicine, art, culture, music, politics, religion, interpersonal and transcultural relations, warfare, fashion, gender and gender roles, as well as everyday life in the Middle Ages and early modernity. Also examines medieval written documents, twentieth-century feminist responses to the Decameron and filmic renditions of it, medieval frescoes, historical descriptions of the plague, and modern descriptions of, and reactions to, the COVID-19 pandemic.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**LITTRANS 260 – ITALY AND THE INVENTION OF AMERICA: FROM COLUMBUS TO WORLD WAR II**

3 credits.

Focuses on the central role played by Italy in the European vision of America between Columbus's voyages and the Second World War.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LITTRANS 261 – SURVEY OF CHINESE LITERATURE IN TRANSLATION**

3 credits.

A critical survey of premodern Chinese literature spanning from the earliest times to the 18th century. Covers representative works of prose, fiction, drama and poetry.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LITTRANS 262 – SURVEY OF CHINESE LITERATURE IN TRANSLATION**

3 credits.

A critical survey of modern and contemporary Chinese literature spanning from the late 19th century to the present. Covers representative works of prose fiction and poetry.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LITTRANS 263 – SURVEY OF JAPANESE LITERATURE IN TRANSLATION**

3 credits.

A historical introduction to the important literary works of Japan. Focus on literary tradition before the restoration of 1868.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LITTRANS 264 – SURVEY OF JAPANESE LITERATURE IN TRANSLATION**

3 credits.

Survey of Japanese Literature from 1868 to present, including novels and short stories by significant authors.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**LITTRANS/SLAVIC 266 – ELEMENTARY SPECIAL TOPICS IN RUSSIAN LITERATURE & CULTURE**

1-3 credits.

Exploration of various topics – periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LITTRANS 268 – FRENCH WOMEN WRITERS FROM THE MIDDLE AGES TO THE NINETEENTH CENTURY**

3 credits.

Representative texts of French women writers from Marie de France, the women troubadours, and Christine de Pizan to Madame de Stael and George Sand, in historical, social, and cultural context.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**LITTRANS/GERMAN/JEWISH 269 – YIDDISH LITERATURE AND CULTURE IN EUROPE**

3 credits.

Exploration of European Yiddish fiction, poetry, folklore, and cinema, with a focus on works of the 19th and 20th centuries.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**LITTRANS/GEN&WS 270 – GERMAN WOMEN WRITERS IN TRANSLATION**

3 credits.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS 271 – IN TRANSLATION: MASTERPIECES OF SCANDINAVIAN LITERATURE, MIDDLE AGES-1900**

3-4 credits.

An introduction to Scandinavian literary and intellectual history, placed in a European context, from Old Norse sagas to end of 19th century.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**LITTRANS 272 – FRENCH POP CULTURE**

3 credits.

Through the exploration of landmark and popular French (and few international) texts, seeks to narrow the perceived gap between low/high art and contextualizes historically and aesthetically French pop culture (as literature, film, graphic novel, music etc.).

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2016**LITTRANS 274 – IN TRANSLATION: MASTERPIECES OF SCANDINAVIAN LITERATURE-THE 20TH CENTURY**

3-4 credits.

An introduction to Scandinavian literary and intellectual history, placed in a European context, from 1900 to present day.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LITTRANS 275 – IN TRANSLATION: THE TALES OF HANS CHRISTIAN ANDERSEN**

3-4 credits.

The works of Hans Christian Andersen, with an emphasis on his best-known fairytales, but also texts from some of the other genres he mastered, focusing on the biographical traits of his stories and his mastery of the genre and complex narrative method.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS/GERMAN 276 – SPECIAL TOPICS IN GERMAN AND WORLD LITERATURE/S**

3 credits.

Exploration of diverse world literary traditions with an emphasis on German and German speaking cultures.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LITTRANS 277 – TOPICS IN TWENTIETH-CENTURY GERMAN LITERATURE (IN TRANSLATION)**

3 credits.

Discussion of major twentieth-century literary texts from Germany, Switzerland, and Austria by such authors as Franz Kafka, Bertolt Brecht, Anna Seghers, Friedrich Durrenmatt, Gunter Grass, Christa Wolf. Possible areas of emphasis: identity formation; technology and culture; literary representations of fascism.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LITTRANS/GERMAN/JEWISH 279 – YIDDISH LITERATURE AND CULTURE IN AMERICA**

3 credits.

Exploration of American Yiddish poetry, fiction, theater, and cinema created by European Jews in the United States.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



### **LITTRANS/GERMAN 280 – FROM GRIMM TO GRYFFINDOR: GERMAN FAIRYTALES (RE)IMAGINED**

3 credits.

From Rumpelstiltskin to Rapunzel, the rich fairy-tale tradition of the German-speaking world is filled with familiar themes and subversive morals. With an eye to depictions of gender, gender roles, sexuality, and race, we critically engage with these tales and contextualize them within the social and political landscapes that shaped them.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **LITTRANS 302 – WHAT IS LIFE? BIOLOGICAL LIFE IN LITERATURE AND CULTURE**

3-4 credits.

Explores representations of biological life in literature, scientific discourse, film, and art. The symbolic representations (metaphors and similes used by scientists, fictions narrated by writers, and pictorial forms imagined by artists) allow students to analyze diverse conceptualizations of biological life: life as mechanism, rhythmic movement, balance of energy, inherent force, resistance to death, death's complementary cycle. The exploration of biological life's attributes, such as plasticity, limitedness, and self-consciousness, fosters interdisciplinary thinking bridging the humanities and life sciences. The symbolic representations of life are studied through different genres of texts and different media, and at different moments of cultural history. The texts and media will be from around the world (with a particular emphasis on French, francophone and Italian sources), but studied in English translation.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **LITTRANS 303 – TOPICS IN FRENCH LITERATURE AND CULTURE**

3-4 credits.

Explores topics in French and Francophone cultures by examining their conceptualizations throughout history as well as their representations in literature and different media such as film and graphic novels. Understand the specificity of French and Francophone cultures and literatures, their contributions to the world's multicultural heritage, and ponder the cultural traditions they claim their own. Possible topics: gender relations, race and ethnicity, social justice, institutional forms of power, human emotions, immigration, colonization and its literary heritage, aesthetic ideals, everyday forms of human interaction, historical memory and its repression, education and acculturation, social rituals, the cultural and political role of language, etc.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **LITTRANS/JEWISH 318 – MODERN JEWISH LITERATURE**

3-4 credits.

Pre-modern Jewish society's breakdown, immigration, the challenges of integration and exclusion, and the establishment of new communities will serve as a backdrop for the analysis and comparison of Jewish literary texts written in Hebrew, Yiddish, German, Russian, and English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **LITTRANS 324 – TOPICS IN SCANDINAVIAN LITERATURE**

3-4 credits.

An examination of selected topics in Scandinavian literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **LITTRANS 326 – TOPICS IN DUTCH LITERATURE IN TRANSLATION**

3 credits.

Study of an author or theme in modern Dutch/Flemish literature, presented by the current Dutch/Flemish writer in residence.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **LITTRANS/FOLKLORE 327 – THE VAMPIRE IN LITERATURE AND FILM**

3 credits.

Explores the image of the vampire in literature and visual arts as a metaphor for Eastern Europe and the Slavic world. Begins with folklore and moves through literary texts to film and television.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LITTRANS/JEWISH/RELIG ST 328 – CLASSICAL RABBINIC LITERATURE IN TRANSLATION**

3-4 credits.

Introduction to the literature of the Classical Rabbinic or Talmudic period of Judaism (2nd to 7th centuries CE). Historical and intellectual background; the interrelation of liturgy, legal and non-legal literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LITTRANS 331 – IN TRANSLATION: SCANDINAVIAN TOPICS IN DEPTH**

1-2 credits.

Penetrating study of an important Scandinavian literary or cultural topic.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**LITTRANS/CLASSICS/HEBR-BIB/JEWISH/RELIG ST 332 – PROPHETS OF THE BIBLE**

4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English).

**Requisites:** CLASSICS/JEWISH/LITTRANS/RELIG ST/CLASSICS/JEWISH/LITTRANS 227 or Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LITTRANS 334 – IN TRANSLATION: THE ART OF ISAK DINESEN/ KAREN BLIXEN**

3-4 credits.

Blixen's tales and biographical fiction.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**LITTRANS/THEATRE 335 – IN TRANSLATION: THE DRAMA OF HENRIK IBSEN**

3-4 credits.

Often considered "the father of modern drama," the Norwegian playwright Henrik Ibsen (1828-1906) is a major figure of world literature whose dramatic works remain fascinating and globally influential, both as texts and through performance and adaptation. Read and discuss Ibsen in English translation, with a focus on Ibsen's historical contexts, dramatic techniques, social and political thought, and the reception and adaptation of his work in modern culture.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**LITTRANS/THEATRE 336 – IN TRANSLATION: THE DRAMA OF AUGUST STRINDBERG**

3-4 credits.

Provides in-depth knowledge of the artistic career of the influential Swedish playwright, August Strindberg (1849-1912), and a general knowledge of the literary, artistic, and intellectual history that shaped his artistic production.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**LITTRANS 337 – IN TRANSLATION: 19TH CENTURY SCANDINAVIAN FICTION**

3-4 credits.

Begins with Romanticism and looks at Norwegian folktales and Hans Christian Andersen's world-famous stories, moving to the Modern Breakthrough, perhaps the most important period in Scandinavian literary history.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

### LITTRANS 340 – CONTEMPORARY SCANDINAVIAN LITERATURE IN TRANSLATION

3-4 credits.

Twentieth-century literary traditions and experiments, with attention to major movements, genres, and authors.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### LITTRANS/FOLKLORE/MEDIEVAL/SCAND ST 345 – THE NORDIC STORYTELLER

3 credits.

Exploring the oral nature and performance traditions of folklore, ethnography, tales and ballads, literature and culture from Nordic areas and Scandinavia.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### LITTRANS/FOLKLORE/MEDIEVAL 346 – IN TRANSLATION: THE ICELANDIC SAGAS

3-4 credits.

Gain an understanding of saga literature as a genre and of the cultural history of Iceland in the Viking Era and the Middle Ages, based on the interplay between pagan codes of honor and Christian ethics.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### LITTRANS/FOLKLORE 347 – IN TRANSLATION: KALEVALA AND FINNISH FOLK-LORE

3-4 credits.

A look at the Kalevala, the Finnish creation myth and national epic of Finland, and how it affected Finnish national identity and the eventual Finnish independence from Russia.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### LITTRANS 350 – SCANDINAVIAN DECADENCE IN ITS EUROPEAN CONTEXT

3-4 credits.

Examines the European context of literary decadence (Baudelaire, Huysmans, Wilde) and how it inspired some of Scandinavia's most important writers (Strindberg, Hamsun, Jacobsen).

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### LITTRANS/SLAVIC 357 – INTERMEDIATE SPECIAL TOPICS IN SLAVIC LANGUAGES AND LITERATURES

3 credits.

Special topics in Slavic and Central and Eastern European Languages and Literatures.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### LITTRANS 360 – FRENCH AND ITALIAN RENAISSANCE LITERATURE ONLINE

3-4 credits.

A virtual journey through Renaissance Italian and French cities; study main literary texts and cultural documents associated with the city or region.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### LITTRANS/SLAVIC 361 – LIVING AT THE END OF TIMES: CONTEMPORARY POLISH LITERATURE AND CULTURE

3 credits.

The collapse of communism and the posthumous triumph of the Solidarity movement started a new era in Polish culture. However, living in "posthistory" comes with its own set of problems. Examine contemporary Polish literature, film, and other cultural forms as they struggle with the country's turbulent past while trying to forge new collective identities for the future. How does culture mediate our relationship with the past? How does it help us understand the present and prepare for the future?

**Requisites:** LITTRANS 215 or SLAVIC 111

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**LITTRANS/ILS/ITALIAN/POLI SCI 365 – MACHIAVELLI AND HIS WORLD**

3 credits.

Introduces students to the major works of Machiavelli through the close reading of his writings in cultural and historical contexts. Discussion and targeted writing assignments will aim at cultivating in students 1) a broad understanding of Machiavelli's principal intellectual attitudes, 2) a deeper understanding of his literary sensibility, and 3) the ability to articulate controversies and complexities surrounding his thought.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**LITTRANS/SLAVIC 366 – INTERMEDIATE SPECIAL TOPICS IN RUSSIAN LITERATURE & CULTURE**

3 credits.

Exploration of various topics - periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature at the intermediate level.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**LITTRANS/JEWISH 367 – ISRAELI FICTION IN TRANSLATION**

3-4 credits.

Major writers, trends and themes in Israeli fiction from pre-State period to present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**LITTRANS 368 – MODERN JAPANESE FICTION**

3 credits.

Intensive study of novels and stories of one or two writers of the modern period (1868 to present), such as Soseki or Tanizaki.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2016**LITTRANS 373 – TOPICS IN JAPANESE LITERATURE**

3 credits.

Focuses on a specific theme in Japanese literary history for in-depth study, such as Contemporary Japanese Novels or Japanese Women Writers.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**LITTRANS 374 – TOPICS IN KOREAN LITERATURE**

3 credits.

Examines major Korean literary texts with emphasis on their social and political contexts. Possible topics: gender and sexuality, historical trauma, modernization, resistance.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**LITTRANS 410 – IN TRANSLATION: SPECIAL TOPICS IN ITALIAN LITERATURE**

3 credits.

Treatment of a specific perific period, genre, theme or movement in Italian literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LITTRANS/THEATRE 423 – IN TRANSLATION: SLAVIC DRAMA IN CONTEXT**

3 credits.

Slavic playwrights and the European tradition of theatre and drama.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020

**LITTRANS/SCAND ST 428 – MEMORY AND LITERATURE FROM PROUST TO KNAUSGARD**

3 credits.

Investigates the relations between theories of memory, both individual and collective, and modern literary representations of remembering. Survey seminal conceptions of memory in the interdisciplinary field of memory studies, investigating topics such as nostalgia, trauma, personal and cultural identity, war and Holocaust, sites of memory, and autobiographical narrative. Through the avenues opened up by these theoretical frameworks, consider the narrative forms as well as the ethical and political dimensions of remembering in major novels by Marcel Proust, W. G. Sebald, and Karl Ove Knausgard.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**LITTRANS/SCAND ST 435 – THE SAGAS OF ICELANDERS IN ENGLISH TRANSLATION**

3 credits.

The prose narratives of medieval Iceland. Gain an understanding of saga literature as a genre and of the cultural history of Iceland in the Viking Era and the Middle Ages, based on the interplay between pagan codes of honor and Christian ethics. In addition, gain an understanding of the methodological problems involved in studying sagas as historical documents.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**LITTRANS/GEN&WS/SCAND ST 438 – SEXUAL POLITICS IN SCANDINAVIA**

3 credits.

Read and discuss works by Scandinavian writers of the nineteenth and twentieth century reflecting sexual politics and the roles of women in literature. Course taught in English.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**LITTRANS 454 – HISTORY OF SERBIAN AND CROATIAN LITERATURE**

3 credits.

Major literary movements of Serbian and Croatian literature from the medieval period until the formation of the Yugoslav state in 1919.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**LITTRANS 455 – MODERN SERBIAN AND CROATIAN LITERATURE IN TRANSLATION**

3 credits.

Study of major twentieth-century writers of Serbia, Croatia, and surrounding areas.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**LITTRANS/SLAVIC 467 – ADVANCED SPECIAL TOPICS IN SLAVIC LANGUAGES AND LITERATURES**

3 credits.

Special topics in Slavic and Central and Eastern European Languages and Literatures.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**LITTRANS 471 – POLISH LITERATURE (IN TRANSLATION), MIDDLE AGES TO 1863**

3 credits.

Intensive study of major writers such as Kochanowski, Krasicki, and Mickiewicz.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021

**LITTRANS 473 – POLISH LITERATURE (IN TRANSLATION) SINCE 1863**

3 credits.

A comprehensive survey of Polish literature and its historical background from 1863 to the present.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

## MANAGEMENT AND HUMAN RESOURCES (M H R)

**M H R 300 – MANAGING ORGANIZATIONS**

3 credits.

The management of people and organizations: diversity, attitude and job satisfaction, emotions, personality and value, individual and group decision making, motivation, teams, leadership, influence, strategy, organizational structure and culture, and change management.

**Requisites:** Open to undergraduates or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 305 – HUMAN RESOURCE MANAGEMENT**

3 credits.

Policies and practices; principles and techniques applicable to problems such as employee staffing, training, labor relations, wages, communications, etc.

**Requisites:** (Freshman, sophomore, or junior standing only), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 310 – CHALLENGES & SOLUTIONS IN BUSINESS SUSTAINABILITY**

3 credits.

Provides central knowledge and skills to tackle challenges at the intersection of business and sustainability. Analysis of the causes of sustainability challenges as relating to business and study of frameworks and measurement systems for incorporating sustainability into corporate decision-making and business analysis.

**Requisites:** Junior standing or declared in undergraduate Business Exchange program. Not open to graduate/professional students

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 320 – NEW VENTURES IN BUSINESS, THE ARTS AND SOCIAL ENTREPRENEURSHIP**

3 credits.

Develop capabilities to conceive of new ventures that create value and critically analyze the role of entrepreneurship in society. Activities include: Imagine/design new ventures, identify markets and funding sources, develop founding teams, do scholarly research on impact of entrepreneurship.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 321 – SOCIAL ENTREPRENEURSHIP**

1 credit.

Learn how to create a socially-engaged businesses and how to use entrepreneurial approaches to non-profit ventures. Activities include developing mission statements, assessing social impact, seeking funding from varied sources. Guest lecturers, cases, role playing. Grounded in management theory.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 322 – INTRODUCTION TO ENTREPRENEURIAL MANAGEMENT**

3 credits.

Students gain knowledge about foundations of entrepreneurship, and key topics such as founding teams, industry analysis assessing concept, communication, managing people and investors in new ventures. Business development project included.

**Requisites:** Not open to undergraduates in the School of Business or graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 365 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M H R 399 – READING AND RESEARCH-MANAGEMENT**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**M H R 401 – THE MANAGEMENT OF TEAMS**

3 credits.

Examines components that comprise teams, highlights key factors that influence team effectiveness, develops skills in diagnosing opportunities and threats that face teams, and enhances teamwork expertise.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R/INTL BUS 403 – GLOBAL ISSUES IN MANAGEMENT**

3 credits.

Focuses on the strategic management required in global business. Topics include environmental analysis, global strategy, and subsidiary control. The aim of the course is to develop special skills that are required to manage international firms.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 412 – MANAGEMENT CONSULTING**

3 credits.

Offers an understanding of fundamental principles, methods, and tools used in management consulting and develop skills to diagnose the functioning of an organization, problem solving, and to design and implement interventions to enhance individual, group, and organizational effectiveness.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 420 – MANAGING CHANGE AND ORGANIZATIONAL EFFECTIVENESS**

3 credits.

Explores the management of organizational change. This includes how large and complex organizations are structured, and basic managerial processes. Topics: How to overcome individual and organizational resistance to change; Classical bureaucratic structure contrasted with contemporary organization structure; the impact of different organizational goals and environments on the structure of organizations; planning, decision-making, coordination and control as related to different technologies and processes.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 422 – ENTREPRENEURIAL MANAGEMENT**

3 credits.

Addresses entrepreneurship as a career, a phenomenon and as a method of bringing ideas to market. Appropriate for students interested in starting entrepreneurial ventures, advising managers or working in a small business. Including opportunity discovery, business and financial planning.

**Requisites:** GEN BUS 310, ACCT I S 300, (ACCT I S 100 and 211), or (ACCT I S 100 and FINANCE/ECON/FINANCE 300) and junior standing; or declared in undergraduate Business Exchange program. Not open to graduate/professional students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 423 – STRATEGIC MANAGEMENT**

3 credits.

Synthesis of material from accounting, economics, finance, operations management, human resources, law, marketing, and technology to consider problems in corporate and business-level strategy; top management problems; discussion of actual business cases.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 427 – ENTREPRENEURIAL GROWTH STRATEGIES**

3 credits.

General management course that analyzes and integrates growth patterns and business disciplines in context of nascent and high growth firms.

**Requisites:** Sophomore standing, M H R 422, and ACCT I S 211; or declared in undergraduate Business Exchange program. Not open to graduate/professional students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 434 – VENTURE CREATION**

3 credits.

Intended for students who seek to transform their own ideas into new ventures. Students will learn the process of evaluating, formalizing, and communicating a new venture idea. Student originated product/service/venture concept required for course.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 441 – TECHNOLOGY ENTREPRENEURSHIP**

3 credits.

Designed for undergraduate students interested in learning about the fundamental issues related to starting and managing technology-based new ventures. Encourages students to consider how technology-based solutions can solve economic and socially oriented problems.

**Requisites:** Sophomore standing, not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R/A A E 540 – INTELLECTUAL PROPERTY RIGHTS, INNOVATION AND TECHNOLOGY**

3 credits.

Uses economic concepts to illustrate the nature of technological innovation, competition, and economic growth. Topics: economics of the intellectual property protection (IPP); market structure and innovation; interaction between public and private sectors; IPP and anticompetitive policies; globalization.

**Requisites:** Graduate/professional standing and (ECON 301 or 311)

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M H R 604 – LEADERSHIP THEORY AND PRACTICE**

2-3 credits.

Presents leadership theories grounded in research in Industrial and Organizational Psychology and Organizational Behavior and the implications of those theories for practice in organizations.

**Requisites:** Not open to students with credit for M H R 704.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 610 – COMPENSATION: THEORY AND ADMINISTRATION**

3 credits.

Determinants of wage levels, wage structures and individual wages; analysis of the impact of wages on individual attitudes and decisions to participate and perform in organizations.

**Requisites:** Sophomore standing and (M H R 305 or 705), or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 611 – STRATEGIC TALENT MANAGEMENT**

2-3 credits.

Explores the strategies and range of processes, methods, and resources that organizations use in talent (human capital) management initiatives to support achievement of business strategy and short and long-term objectives. The focus is on understanding the fundamentals of effective talent management including talent attraction, talent acquisition, talent (career) development, motivation and engagement, and talent retention.

**Requisites:** M H R 300, 305, graduate/professional standing, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 612 – LABOR-MANAGEMENT RELATIONS**

3 credits.

Labor-management relations at the firm level including its evolution, characteristics and contemporary issues. Emphasis on analysis of the labor-management relationship through reference to theory and research on collective action, bargaining behavior and conflict resolution.

**Requisites:** Sophomore standing and (M H R 305 or 705), or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 614 – PEOPLE ANALYTICS**

2-3 credits.

Technological advances have led many organizations to adopt a more "data-driven" approach to managing their employees. It is therefore critical for managers to understand how to integrate data analytics into their organization's human resource management or risk being at a competitive disadvantage. Build hands-on skills to analyze data in ways that facilitate the development and evaluation of human capital policies, practices, programs, and strategies. Learn to take advantage of data and analytics in decision-making processes. Emphasis on experiential learning using data from various organizational contexts.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 617 – DIVERSITY IN ORGANIZATIONS**

2-3 credits.

Provides a thorough understanding of the advantages and challenges presented by workplace diversity, suggesting techniques to manage effectively and maximize the benefits of diversity. Includes a comprehensive survey of demographic groups and an analysis of their history to foster a thorough understanding of the dimensions of diversity. Discussions will include effectively managing diversity on the basis of race, sex, LGBTQIA, religion, age, ability, national origin, and intersectionality in organizations and about issues various groups face, including discrimination. Provides practical insight into subconscious/implicit bias, team diversity, and diversity management in the United States and abroad. Goal is to learn to work with diverse groups to create a productive organization in which everyone feels included.

**Requisites:** Junior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 628 – NEGOTIATIONS**

2-3 credits.

Theory and practice of negotiations.

**Requisites:** Sophomore standing or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **M H R/INTEGART 632 – INTRODUCTION TO ARTS ENTREPRENEURSHIP**

3 credits.

An overview and foundation in preparation for developing, launching, or advancing innovative projects in arts, culture, design, and humanities. Learn the unique contexts and challenges of creative careers. Develop creative project goals while gaining an understanding of the nature and structure of arts entrepreneurship in a variety of sectors – for-profit, nonprofit, government, and hybrid.

**Requisites:** Sophomore standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **M H R/INTEGART 636 – ENTREPRENEURSHIP IN ARTS & CULTURAL ORGANIZATIONS**

3 credits.

Become familiar with basic entrepreneurship principles and value proposition design techniques in social entrepreneurship settings with attention to the perspective of arts and cultural organizations. Content includes business model development, customer-driven innovation, lean startup practices, organizational capacity for entrepreneurial action, team performance, the structure of alliances and partnerships and funding mechanisms in the sector.

**Requisites:** Junior standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **M H R 640 – CREATIVE DESTRUCTION LAB I**

1 credit.

Introduces key topics and concepts associated with technology entrepreneurship, venture formation, and project-based organizational consulting. Allows for practice of key analytical approaches to understanding technology venturing processes. Application required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

### **M H R 641 – CREATIVE DESTRUCTION LAB II**

2 credits.

Action learning through engaging with a real-world technology venture in the context of a knowledge-intensive industry. In teams, negotiate a project to support venture development, plan and implement the project, and present the results to the venture and the instructor. Provides direct insight into technology venture processes, observation of pitching and mentoring activities, and the real-world challenges associated with early stage venturing.

**Requisites:** M H R 640

**Repeatable for Credit:** No

### **M H R 700 – LEADING PEOPLE AND ORGANIZATIONS**

1-3 credits.

Management of people and organizations, exploring concepts that will be valuable as a current employee or a future employee, manager, or leader. Concepts will be discussed at the individual, group or team, and the organizational level. Key organizational behavior topics include: diversity, attitude and job satisfaction, emotions, personality and value, individual and group decision making, motivation, teams, leadership, influence, strategy, organizational structure and culture, and change management.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **M H R 704 – MANAGING BEHAVIOR IN ORGANIZATIONS**

2-3 credits.

Examines the effective management of behavior in organizations. Focuses on the application of theories of leadership and work motivation. Includes critical conceptual and analytical assessment of these theories. Emphasizes the management of work performance, managerial skill building, and enabling followers.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **M H R 705 – HUMAN RESOURCE MANAGEMENT**

3 credits.

Two broad substantive areas are covered. (1) Evidence (theoretical and empirical) reviewed on the determinants of employee job attitudes and behavior. For example, the impact of compensation on employee satisfaction and performance. (2) Functional activities of personnel management and their impact on employee behavior evaluated. Sample topics: Selection, development, evaluation and compensation. Knowledge of Statistics strongly encouraged such as STAT 301.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 706 – LEADING AND WORKING IN TEAMS**

1 credit.

Examines team dynamics, highlights key factors that influence team effectiveness, develops skills in diagnosing opportunities and threats that face teams, and enhances teamwork expertise. The content is applicable to projects across specializations. For instance, teamwork skills are essential to project teams developing new products/services, working on business strategy, implementing process improvements, designing new financial investment instruments, and developing real estate. In any of these projects, employees would work as a team to accomplish their goals. The team's success or failure will depend, to a large extent, on how the team members work together.

**Requisites:** Declared in a Master of Business Administration degree program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 710 – CHALLENGES & SOLUTIONS IN BUSINESS SUSTAINABILITY**

2-3 credits.

Provides central knowledge and skills to tackle challenges at the intersection of business and sustainability. Analysis of the causes of sustainability challenges as relating to business and study of frameworks and measurement systems for incorporating sustainability into corporate decision-making and business analysis.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 715 – STRATEGIC MANAGEMENT OF INNOVATION**

2-3 credits.

Helps student gain tools, concepts and information about how to generate value from Innovation and technology in existing organizations.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 716 – ACCELERATING INNOVATION**

2-3 credits.

How startups and business accelerators create and diffuse innovation. Topics covered include the basic economics of startups and business accelerators, the development of acceleration platforms, the accelerator model of innovation sourcing and selection, and fostering mindsets of innovation.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M H R 720 – LEADING CHANGE IN ORGANIZATIONS**

2-3 credits.

To be effective, leaders must be able to adapt their organization and the people within it to address the challenges they face. Explore how leaders can enact, foster, and implement change in organizations and individuals. Topics will include managing organizational transformations, responding to crises, and performance improvement.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M H R 722 – ENTREPRENEURIAL MANAGEMENT**

2-3 credits.

Describes activities and skills necessary to start and manage an enterprise. Includes decisions about domain, purchase versus start-up, preferred market, financing, legal form, staffing, organization structure, location, and legal requirements. Describes the entrepreneurial role in business initiation.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 723 – BUSINESS STRATEGY**

2-3 credits.

Integrative approach to strategic management, including strategy formulation/implementation at business unit, corporate levels. Cases, discussion, lecture, simulation are used to communicate concepts. Emphasizes development of unique tools for analysis of companies and industries, application of knowledge to business problems.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 724 – GROWTH STRATEGIES: MULTI BUSINESS AND GLOBAL ARENAS**

2-3 credits.

Examines growth strategies that extend the firm's scope into new businesses and geographies. Most firms operate in multiple products, markets, and geographic arenas. Explore complementarities (and costs) of operating in a portfolio of strategic arenas defined by products, customers, and global markets. This includes the analysis of strategic choices to vertically integrate (e.g., internal suppliers) as well as maintaining external alliance partners.

**Requisites:** (M H R 723 or concurrent enrollment) or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M H R 728 – BARGAINING, NEGOTIATING AND DISPUTE SETTLEMENT FOR MANAGERS**

3 credits.

Designed to improve student knowledge of the bargaining process and their negotiating skills. Students will learn about different bargaining theories and have the opportunity to apply these theories in exercises and role-playing cases.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R/I SY E 729 – BEHAVIORAL ANALYSIS OF MANAGEMENT DECISION MAKING**

3 credits.

Examination of behavioral science literature dealing with the processes by which individuals, small groups and organizations make decisions. Understanding decision-making behavior in order to improve managerial performance; modeling decision-making processes for systems design and theory building purposes. Knowledge of statistics strongly encouraged such as STAT 301.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 734 – VENTURE CREATION**

3 credits.

Intended for students who seek to transform their own ideas into new ventures. Students will learn the process of evaluating, formalizing, and communicating a new venture idea. Student originated product/service/venture concept required for course.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 738 – WEINERT APPLIED VENTURES IN ENTREPRENEURSHIP (WAVE)**

3 credits.

Students develop and present comprehensive business and financing plans for a start-up firm. Investment recommendations are made to the WAVE Board. Class meets in a seminar format with various subject matter experts.

**Requisites:** M H R 715, 722, 734, or 741

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 739 – WISCONSIN ENTERPRISE DEVELOPMENT FELLOWSHIP SEMINAR**

1 credit.

An applied early stage startup practicum and professional socialization seminar in Entrepreneurship and Enterprise Development for students admitted into the Wisconsin Fellowship in Enterprise Development Program. Meets weekly on the topic of entrepreneurship and enterprise development. Learn to apply business and entrepreneurship frameworks and skills in a class project focused on early-stage ideas. Requires admission to the Wisconsin Enterprise Development Fellowship program

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 741 – TECHNOLOGY ENTREPRENEURSHIP**

3 credits.

Designed for graduate students interested in learning about the fundamental issues related to starting and managing technology-based new ventures. Encourages students to consider how technology-based solutions can solve economic and socially oriented problems.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R/CSCS 742 – NONPROFIT BOARD LEADERSHIP DEVELOPMENT I**

2 credits.

Part one of a two part course sequence. Develop a commitment to community and civic engagement through volunteer leadership of nonprofit organizations in Madison/Dane County. Serve on the boards of nonprofits (in a non-voting capacity) and complete an independent governance project.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R/CSCS 743 – NONPROFIT BOARD LEADERSHIP DEVELOPMENT II**

1 credit.

Part two of a two part course sequence. Continued development of a commitment to community and civic engagement through volunteer leadership of nonprofit organizations in Madison/Dane County. Continued service on the boards of nonprofits (in a non-voting capacity) and completion of an independent governance project.

**Requisites:** M H R/CSCS/M H R 742

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 744 – NONPROFIT GOVERNANCE & BOARD MEMBERSHIP**

2 credits.

Learn about nonprofit board structure and governance, develop a commitment to community and civic engagement, and network with representatives from nonprofit organizations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M H R 746 – IMPACT CONSULTING FOR ARTS-BASED ORGANIZATIONS AND COMMUNITIES I**

3 credits.

With the Wisconsin Idea as our guidepost, emphasis placed on learning and practicing the conceptual frameworks and skills related to creating lasting and sustainable impact in Wisconsin communities. Through classroom discussions, guest speakers, site visits, and field-consulting project(s), acquire and practice skills needed in designing, facilitating and developing key relationships and strategies that promote community vibrancy, revitalization, and create (or keep) the essence of what makes our Wisconsin towns and organizations special. Examples of the types of projects that will be conducted include the development of cultural plans, strategic/comprehensive community planning, program evaluations, change management, bench-marking, data collection and analysis, hosting public convenings (focus groups, town halls and forums), and business modeling.

**Requisites:** Declared in Business: General Management graduate program, Business: Management and Human Resources graduate program, Business: Arts Administration MBA, or Business: Arts and Creative Enterprise Leadership MAB.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 747 – IMPACT CONSULTING FOR ARTS-BASED ORGANIZATIONS AND COMMUNITIES II**

2-3 credits.

With the Wisconsin Idea as our guidepost, emphasis placed on learning and practicing the conceptual frameworks and skills related to creating lasting and sustainable impact in Wisconsin communities. Through classroom discussions, guest speakers, site visits, and field-consulting project(s), acquire and practice skills needed in designing, facilitating and developing key relationships and strategies that promote community vibrancy, revitalization, and create (or keep) the essence of what makes our Wisconsin towns and organizations special. Examples of the types of projects that will be conducted include the development of cultural plans, strategic/comprehensive community planning, program evaluations, change management, bench-marking, data collection and analysis, hosting public convenings (focus groups, town halls and forums), and business modeling.

**Requisites:** M H R 746

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R 750 – PROFESSIONAL DEVELOPMENT FOR ARTS LEADERSHIP**

1 credit.

Experience networking, engagement, and access to research and industry leaders. Practice active reflection through application of course concepts in non-classroom settings. Includes professional development through career services support and mock interview panels.

**Requisites:** Declared in Business: Arts and Creative Enterprise Leadership MA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**M H R 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M H R 773 – SEMINAR-ARTS ADMINISTRATION**

3 credits.

Examination and applied analysis of selected topics in administration of both visual and performing arts organizations; marketing and audience development, contracts and legal problems, fund development, program planning and evaluation, facilities management, business and government relations.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 774 – SEMINAR-ARTS ADMINISTRATION**

3 credits.

Continuation of M H R 773.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**M H R 775 – APPLIED LEARNING IN HUMAN RESOURCE MANAGEMENT**

1 credit.

Explore emerging and current human resources topics through applied learning experiences such as personal assessments, case studies, industry meetings, and exercises or workshops. Interact with leading human resources and business professionals to gain exposure to various leadership and communication styles. Focus on enhancing leadership and communication effectiveness.

**Requisites:** M H R 705 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 4 number of completions

**M H R 776 – STRATEGIC HUMAN RESOURCE MANAGEMENT CAPSTONE**

2 credits.

Conduct research, apply strategic human resources knowledge, and complete a capstone project for a local client organization, addressing a human resources business challenge or need.

**Requisites:** M H R 705 and GEN BUS 725

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M H R/E P D/GEN BUS 783 – LEADING TEAMS**

1 credit.

Students will gain the knowledge and skills to continuously enhance their own team performance and productivity as well as the teams they are involved with. They will also be in a much better position to lead teams effectively.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M H R/E P D/GEN BUS 785 – EFFECTIVE NEGOTIATION STRATEGIES**

1 credit.

Improves students' negotiating skills, doing so by providing a theoretical underpinning that will help them to understand the sources of effective and ineffective approaches to negotiations.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**M H R 799 – READING AND RESEARCH-MANAGEMENT**

1-6 credits.

Individual work suited to the needs of graduate students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M H R 871 – SEMINAR-PERSONNEL MANAGEMENT**

3 credits.

Study and evaluation of merging issues in the field of personnel management. Extensive reading of appropriate literature together with analysis, reports and discussions.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 872 – SEMINAR IN ORGANIZATIONAL BEHAVIOR AND DESIGN**

3 credits.

Analysis and discussion of selected topics in organizational behavior and design.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**M H R 973 – DOCTORAL RESEARCH SEMINAR IN BUSINESS STRATEGY**

3 credits.

This doctoral level strategy research seminar invites students to explore drivers of performance heterogeneity among firms. Why do some firms out-perform others? The topic is integrative in that the answer draws on theory and empirical evidence from economics, sociology, and psychology, as well as management and organizational theory that is more interdisciplinary in nature. In studying this topic, we also focus on the research process: what is the anatomy of a scholarly contribution in strategy and how does one conduct strategy research?

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M H R 975 – DOCTORAL RESEARCH SEMINAR IN MANAGEMENT**

3 credits.

Seminar for Ph.D. candidates majoring in management and at or near the doctoral thesis stage. Focus: Assisting the student in working through the conceptualization and design of a thesis topic.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**M H R 976 – DOCTORAL RESEARCH SEMINAR IN MANAGEMENT**

2 credits.

Continuation of M H R 975.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M H R 977 – EMERGING ENTREPRENEURSHIP THEORY AND RESEARCH**

3 credits.

This PhD seminar explores contemporary entrepreneurship theory and research topics; providing students an opportunity to probe and develop scholarly theories of entrepreneurial behavior and outcomes. The course will incorporate presentations by the instructor, students and invited speakers.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M H R 990 – MANAGEMENT INDEPENDENT RESEARCH PHD THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M H R 999 – READING AND RESEARCH-MANAGEMENT AND HUMAN RESOURCES PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MARKETING (MARKETNG)****MARKETNG 300 – MARKETING MANAGEMENT**

3 credits.

Planning and controlling the elements of the marketing program; marketing organization, product and service, packaging, pricing, promotion and physical distribution.

**Requisites:** (ECON 101, 111, or A A E 215) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 305 – CONSUMER BEHAVIOR**

3 credits.

Consumer behavior is a broad field that studies how individuals, families and groups acquire, consume, and dispose of goods, services, ideas and experiences. Provides an integrated view of consumer behavior that draws on psychological, economic, anthropological and sociological perspectives to enhance understanding of consumer acquisition processes.

**Requisites:** (Sophomore standing and MARKETNG 300) or declared in the Business Exchange program. Not open to students with credit for CNSR SCI 657.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 310 – MARKETING RESEARCH**

3 credits.

Systematic and objective search for and analysis of information relevant to the identification and solution of problems in marketing.

**Requisites:** Sophomore standing, MARKETNG 300 and (GEN BUS 303 or 306), or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 335 – BRAND MANAGEMENT & STRATEGY**

3 credits.

To provide an understanding of brands, how they work and to apply brand knowledge to managerial situations. Knowledge of brand history, societies and cultures that surround them, critical mental processes, marketing imperatives, and the economics that underlie them to understand brands.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG 355 – MARKETING IN A DIGITAL AGE**

3 credits.

A foundational understanding of digital marketing channels and how successful marketing campaigns use the numerous online and mobile platforms. Fundamentals of digital marketing including internet marketing strategies, user-generated content, search engine optimization, website design and management, inbound marketing, email marketing, social media campaigns, mobile apps, content strategy and paid search advertising.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 365 – CONTEMPORARY TOPICS**

1-3 credits.

A course for the exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MARKETNG 375 – SOCIAL MEDIA MARKETING**

3 credits.

Social Media (Facebook, Twitter, Instagram etc.) has changed the way brands communicate with their consumers and vice versa. In this digital age, marketers and entrepreneurs can create competitive advantage for their brand by mastering the science and art of social media strategy. The goal is to understand how brands can leverage social for competitive advantage, consumer listening and innovation. Provides a strong theoretical foundation coupled with practical experience of developing and managing social media strategies for brands.

**Requisites:** MARKETING 300 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 399 – READING AND RESEARCH-MARKETING**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**MARKETNG 410 – SPORTS MARKETING**

3 credits.

An overview of the issues and trends in sports marketing. Attention will be given to the issues facing sport organizations and to the use of marketing techniques to solve business-related problems. It will also focus on the challenges of organizations that use sports properties to enhance their marketing efforts. We will examine the world of sports as a business with a focus on attracting the customer in a competitive, fragmented and global market and consider how sports marketers develop and apply strategies to meet their objectives.

**Requisites:** MARKETNG 300 or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 415 – SOCIAL CREATIVE MARKETING**

3 credits.

Covers multiple approaches to marketing communications. Identifies unique opportunities for creatively solving problems. Develops skills to approach marketing solutions from creative ethical perspectives. Builds and refines marketing skills required to identify, articulate, and resolve marketing and policy problems. Leverages marketing communications to improve society and well-being.

**Requisites:** MARKETING 300 or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG/INTL BUS 420 – GLOBAL MARKETING STRATEGY**

3 credits.

Structure of foreign trading; commercial facilities available to exporters and importers; application of economic analysis in marketing decisions; contemporary trends in international economy affecting foreign trade policies and practices.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/OTM 421 – FUNDAMENTALS OF SUPPLY CHAIN MANAGEMENT**

3 credits.

Supply chain management (SCM) is a dynamic, cross-functional discipline that encompasses the areas of strategy, product development/innovation, marketing, finance, sourcing, production, logistics, and technology in both product and service industries. The supply chain is responsible for the sustainable and efficient movement of products, services, funds, and data along the value chain. Companies must effectively coordinate these functions not only within the firm, but with business partners and customers around the world. SCM is a critical, strategic component of any business or organization, from high-tech to healthcare, and it is a fundamental knowledge base for any student of business.

**Requisites:** Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/OTM 422 – LOGISTICS MANAGEMENT**

3 credits.

Provides a management perspective on the fundamental activities, concepts, and current practices in logistics. Transportation management, order fulfillment, warehousing, global logistics, key performance indicators, outsourcing, and introduction to radio frequency identification and barcoding. Use of case studies and industry speakers.

**Requisites:** MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG/OTM 423 – PROCUREMENT AND SUPPLY MANAGEMENT**

3 credits.

Procurement and supply management is the business function concerned with an organization's acquisition of required materials, services, and equipment. Explores the key aspects of modern supply management including the purchasing process, cost management, negotiation, sourcing strategies, supplier management, category management, acquisition methods for materials and services, and outsourcing.

**Requisites:** Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 424 – SALES STRATEGY AND MANAGEMENT**

3 credits.

Emphasis on business and organizational selling and covers professional selling techniques, business development and relationship building, integrating sales and marketing, utilizing sales technology and analytics, as well as building and managing an effective sales force.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 425 – MARKETING CHANNEL STRATEGY**

3 credits.

Marketing channels are the inter-organizational systems and entities involved in making products and services available for consumption at the right place, time, and customer value proposition. Explore the elements, design, and management of marketing channels including channel institutions/entities; market segmentation; selecting and incentivizing partners; managing channel relationships, power, and conflict. Particular emphasis will be placed on the strategic role of channels in achieving a firm's objectives.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 426 – STRATEGIC RETAILING**

3 credits.

Provides an overview of the different types of retailers and the channels they use, the retailing environment, the functions retailers perform, the decision-making processes of consumers with respect to retailers and their offerings, and various issues in retailing strategy, merchandise management and store management.

**Requisites:** Sophomore standing or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MARKETNG/OTM 427 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS**

3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.

**Requisites:** MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/OTM 428 – SUPPLY CHAIN CAPITAL MANAGEMENT**

3 credits.

Introduce the set of activities and solutions available to finance an organization's supply chain infrastructure. Define and study the related influencers. Investigate risks and mitigation techniques relative to associated metrics and strategies. Analyze multiple cases in group study work. Identify and recommend improvement opportunities.

**Requisites:** Junior standing and (MARKETNG 300 or OTM 300), or declared in the Business Exchange program

**Repeatable for Credit:** No

**MARKETNG 430 – STRATEGIC PRICING**

3 credits.

Pricing is one of the most important but least understood of marketing decisions. This course aims to equip you with key concepts and techniques for evaluating and formulating pricing strategies. We will use a combination of analytical and experiential learning methods to accomplish this objective.

**Requisites:** (MARKETNG 300 and sophomore standing) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 437 – NEW PRODUCT INNOVATION**

3 credits.

Explores strategies and processes by which organizations effectively discover, develop, and launch impactful new products. Includes design thinking methods and the stage-gate approach to generate and evaluate new product ideas.

**Requisites:** (MARKETNG 300, 305, and 310) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 445 – DIGITAL MARKETING ANALYTICS**

3 credits.

Introduces business analytic techniques applied in the context of digital marketing. Includes approaches to design, run, evaluate, and improve online marketing tactics in order to meet specific business objectives such as customer acquisition. Covers digital analytics methods and execution of marketing tactics with data-driven techniques. Emphasizes the implementation of analytic skills on practical problems.

**Requisites:** Sophomore standing, MARKETNG 300 and (GEN BUS 303 or 306), or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 450 – MARKETING ANALYTICS**

3 credits.

Impact of analytics on successful marketing decisions. Topics include marketing metrics, digital analytics, marketing response models, segmentation, product design, experimentation and big data. It is designed for students with some background in quantitative methods and an exposure to basic marketing research concepts. A combination of lectures, cases and hands-on model building focused on marketing analytics.

**Requisites:** Sophomore standing, MARKETNG 300, and 310. Not open to graduate students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 460 – MARKETING STRATEGY**

3 credits.

Capstone marketing decision-making course emphasizing analysis of the external environment. The coordination of tactical and strategic marketing plans with the goals and objectives of the firm.

**Requisites:** Senior standing, MARKETNG 300, 305, and 310, or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 700 – MARKETING MANAGEMENT**

2-3 credits.

Provides a framework for evaluating marketing problems and developing a marketing strategy. Customer, competitor, and collaborator factors are emphasized as foundations for marketing decision-making. Examines the key aspects of product, pricing, distribution, and promotion strategy.

**Requisites:** Declared in a Master of Business Administration degree program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG 705 – CONSUMER BEHAVIOR**

2-3 credits.

Analysis of theories and models of behavior which underlie the process of consumer decision-making. Marketing applications of psychological, sociological and social-psychological factors.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 710 – MARKETING RESEARCH**

2-3 credits.

An overview of the marketing research process from a methodological perspective. Topics: Research design, data collection procedures, sampling and data analysis.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 715 – SOCIAL CREATIVE MARKETING**

2-3 credits.

Covers multiple approaches to marketing communications. Identifies unique opportunities for creatively solving problems. Develops skills to approach marketing solutions from creative ethical perspectives. Builds and refines marketing skills required to identify, articulate, and resolve marketing and policy problems. Leverages marketing communications to improve society and well-being.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG/OTM 722 – LOGISTICS MANAGEMENT**

2-3 credits.

A foundation in transportation, order fulfillment, warehousing, materials planning including MRP, demand planning, import/export fundamentals, ERP systems, supply chain metrics, and leading supply chain technologies such as RFID.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG/OTM 724 – STRATEGIC GLOBAL SOURCING**

3 credits.

Supply management (procurement) is widely recognized as one of the most critical elements in global supply chain management. The function plays a major role in maximizing the value and the integration of supply chain operations. Explores the key aspects of modern supply management including functional responsibilities and exemplary practices for major industry sectors.

**Requisites:** Graduate/professional standing and (MARKETNG 300 and OTM 300) or (MARKETNG 700 and OTM 700)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 725 – MARKETING CHANNEL STRATEGY**

2-3 credits.

Marketing channels are the inter-organizational systems and entities involved in making products and services available for consumption at the right place, time, and customer value proposition. Explores the elements, design, and management of marketing channels including channel institutions/entities; market segmentation; selecting and incentivizing partners; managing channel relationships, power, and conflict. Particular emphasis will be placed on the strategic role of channels in achieving a firm's objectives.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700, OTM 300, or 700), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/OTM 726 – SUPPLY CHAIN STRATEGY**

3 credits.

Focuses on strategic issues and current theory and practice in supply chain management. Effective design and management of supply chain resources is a key source of competitive advantage for organizations. Supply chain management is a cross-functional discipline that concentrates on the management of goods, services, and information among all links in the value chain.

**Requisites:** (MARKETNG 300 and OTM 300) or (MARKETNG 700 and OTM 700) and graduate/professional standing, or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MARKETNG/OTM 727 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS**

3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/OTM 728 – SUPPLY CHAIN CAPITAL MANAGEMENT**

3 credits.

Supply chain capital management refers to the set of activities and solutions available to finance an organization's supply chain infrastructure. As supply chains become more extended and complicated a need has developed to both manage and fund the supply network. Define and study the various influencers on the supply chain capital structure. Investigate risks, mitigation techniques, metrics and themes relating to the topic.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MARKETNG 730 – STRATEGIC PRICING**

2-3 credits.

Pricing is one of the most important but least understood of marketing decisions. Focus on key concepts and techniques for evaluating and formulating pricing strategies through analytical and experiential learning methods.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 735 – BRAND STRATEGY**

2-3 credits.

Provides a comprehensive and up-to-date treatment of the subjects of brand, brand equity, and strategic brand management. Examines the concepts and techniques to improve the long-term performance of brand strategies.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**MARKETNG 737 – NEW PRODUCT INNOVATION**

2-3 credits.

Explores strategies and processes by which organizations effectively discover, develop, and launch impactful new products. Includes design thinking methods and the stage-gate approach to generate and evaluate new product ideas.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 745 – DIGITAL MARKETING ANALYTICS**

2-3 credits.

Introduces business analytic techniques applied in the context of digital marketing. Includes approaches to design, run, evaluate, and improve online marketing tactics in order to meet specific business objectives such as customer acquisition. Covers digital analytics methods and execution of marketing tactics with data-driven techniques. Emphasizes the implementation of analytic skills on practical problems.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 755 – MARKETING IN A DIGITAL AGE**

2-3 credits.

A foundational understanding of digital marketing channels and how successful marketing campaigns use the numerous online and mobile platforms. Fundamentals of digital marketing including internet marketing strategies, user-generated content, search engine optimization, website design and management, inbound marketing, email marketing, social media campaigns, mobile apps, content strategy and paid search advertising.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 760 – GROWTH MARKETING STRATEGIES**

2-3 credits.

Development and effective implementation of planned growth marketing strategies is a pre-requisite to enhancing business performance but is difficult to do. Explore the following topics utilizing an evidence-based approach: growth marketing strategy frameworks; resources and capability for marketing strategy formulation and execution; market orientation, customer orientation, and competitor orientation; key strategy decision points (market selection, value proposition, timing); common implementation problems; organizing for execution; and metrics and performance assessment.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**MARKETNG 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate standing and (MARKETNG 300 or 700)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MARKETNG 770 – MARKETING CONSULTING PRACTICUM**

2-4 credits.

Apply and synthesize acquired knowledge through an applied consulting project. Provides the opportunity to explore/apply concepts like identifying and understanding the business challenge; applying marketing research and analytics methods to discover consumer insight to help answer the business challenge; developing recommendations based on the discovered findings; and communicating findings and recommendation(s).

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2022

**MARKETNG 775 – SOCIAL MEDIA MARKETING**

2-3 credits.

Social Media (Facebook, Twitter, Instagram etc.) has changed the way brands communicate with their consumers and vice versa. In this digital age, marketers and entrepreneurs can create competitive advantage for their brand by mastering the science and art of social media strategy. The goal is to understand how brands can leverage social for competitive advantage, consumer listening and innovation. Provides a strong theoretical foundation coupled with practical experience of developing and managing social media strategies for brands.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG/E P D/GEN BUS 782 – MARKETING FOR NON-MARKETING PROFESSIONALS**

1 credit.

An overview of marketing's role within an organization, the key elements of a marketing plan, and how the plan is implemented. Students will learn about buyer demographic, psychographic and purchasing decision behavior. A thorough understanding of the customer enables students to develop a coordinated marketing mix (product, price promotion and place) that will satisfy the customer better than the competition and at the required margin. Students will leave the course understanding the degree to which all company functions must be coordinated and focused on the customer. This course will not apply toward fulfilling the MBA degree requirements.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 799 – READING AND RESEARCH-MARKETING**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**MARKETNG 805 – QUALITATIVELY-BASED MARKETING INSIGHTS**

2-3 credits.

Understanding and application of in-depth qualitative market research methods, with an emphasis on the interpretation of qualitative data. Provides hands-on experience with different methodological techniques and immersion in a cultural perspective for systematically analyzing data from a marketing perspective.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 815 – MARKETING ANALYTICS**

2-3 credits.

Study of the impact of analytics on successful marketing decisions. A spectrum of topics include Marketing Metrics, Digital Analytics, Marketing Response Models, Segmentation, Product Design, Experimentation and Big Data. Applicable to careers in marketing analytics, product management and consulting.

**Requisites:** Graduate/professional standing and (MARKETNG 300, 700 or GEN BUS 311), or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MARKETNG 840 – CURRENT TOPICS IN MARKETING**

1 credit.

Expose to emerging and current topics in the industry of marketing through applied learning experiences - case studies, industry meetings, and exercises or workshops.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**MARKETNG 971 – SEMINAR-MARKETING PHD, CONTEMPORARY TOPICS IN MARKETING**

1-3 credits.

Analysis and discussion of contemporary issues in marketing.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MARKETNG 972 – SEMINAR-MARKETING PHD, RESEARCH METHODS IN MARKETING**

1-3 credits.

Specialized subject matter of current interest to doctoral students.

**Requisites:** Declared in Business PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MARKETNG 990 – MARKETING INDEPENDENT RESEARCH PHD THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MARKETNG 999 – READING AND RESEARCH-MARKETING PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# MATERIALS SCIENCE AND ENGINEERING (M S & E)

## M S & E 1 – COOPERATIVE EDUCATION PROGRAM

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Sophomore standing

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## M S & E 151 – MATERIALS OF THE MODERN WORLD

3 credits.

The properties and structure of everyday materials. A non-mathematical exploration of the relation between structure and resulting properties of metals, plastics, ceramics, glasses, and composite materials. Case studies of important materials in the modern and historical context.

**Requisites:** None

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

## M S & E 250 – INTRODUCTION TO MODERN MATERIALS

1 credit.

This course is designed to provide incoming students with an overview of the structure of materials and the relation to properties. Special emphasis is placed on modern materials and recent advancements in their application.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

## M S & E 260 – MATERIALS EXPERIENCE

2 credits.

Provides overview of the field of Materials Science and Engineering, with significant design and hands-on components. Highlights different types of materials, with a focus on describing the extensive impact that Materials Science and Engineering has had on society. Small teams provide hands-on experience in materials design, synthesis, and processing and the fabrication of materials with desired properties and function.

**Requisites:** (MATH 113, 114, or 171) and (CHEM 103, 109, or 115 or concurrent enrollment)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## M S & E 299 – INDEPENDENT STUDY

1-3 credits.

Independent study under faculty supervision.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## M S & E 330 – THERMODYNAMICS OF MATERIALS

4 credits.

Introduction to thermodynamics of materials, equilibrium constants, solutions, heterogeneous equilibria and electrochemistry.

**Requisites:** MATH 222 or 276 and (CHEM 104, 109, or 115), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## M S & E 331 – TRANSPORT PHENOMENA IN MATERIALS

3 credits.

Basic principles of fluid flow, heat transfer and diffusion are introduced. Examples relevant to design and processing of materials including metals, semiconductors, glasses, polymers, and ceramics are given.

**Requisites:** M S & E 330 and (MATH 319, 320, 376, or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## M S & E 332 – MACROPROCESSING OF MATERIALS

3 credits.

Topics include: ironmaking and steelmaking; production of Cu, Zn, Al and Mg by electrolysis; solidification processing of alloys by ingot casting, continuous casting and directional solidification; growth of bulk single crystals of semiconductors and ceramics from melts.

**Requisites:** M S & E 350, 351, or CBE 440, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## M S & E 333 – MICROPROCESSING OF MATERIALS

3 credits.

Integration of materials science theory and materials engineering practice as applied to the processing of materials at the microscopic level.

**Requisites:** M S & E 350, 351, or CBE 440, or member of Engineering Guest Students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## M S & E 350 – INTRODUCTION TO MATERIALS SCIENCE

3 credits.

The basic structures and resulting properties of solid materials, including phase equilibria, meta-stability, mechanical properties, failure, corrosion, and materials selection.

**Requisites:** CHEM 103, 109, 115, graduate/professional standing, or member of Engineering Guest Students. Not open to students with credit in M S & E 351.

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 351 – MATERIALS SCIENCE-STRUCTURE AND PROPERTY RELATIONS IN SOLIDS**

3 credits.

Introduction to: atomic, electronic, and defect structures in materials; diffusional, mechanical and electrical properties of materials; and the role of structure and defects in diffusional, mechanical, and electrical properties.

**Requisites:** (MATH 222 or 276) and (CHEM 103, 109, or 115), or member of Engineering Guest Students. Students with credit for M S & E 350 may not enroll in M S & E 351.

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 352 – MATERIALS SCIENCE-TRANSFORMATION OF SOLIDS**

3 credits.

The basic factors that determine phase equilibria, structural and transformation characteristics of solids. Principles governing the thermodynamics and kinetics of phase transformations and microstructure evolution. Nucleation and growth processes in precipitation, recrystallization, solidification, oxidation, martensitic, ordering and spinodal reactions. Transformation behavior in polymers, biomaterials and nanomaterials.

**Requisites:** M S & E 350, 351, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 360 – MATERIALS LABORATORY I**

2 credits.

Laboratory instruction in sample preparation for and applications of quantitative microscopy, x-ray diffraction, and properties measurement in the context of structure-property relationships in materials.

**Requisites:** M S & E 350 or (M S & E 351 or concurrent enrollment) and declared in Materials Science and Engineering or Applied Mathematics, Engineering and Physics

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 361 – MATERIALS LABORATORY II**

2 credits.

Experimental principles of materials science. Thermal, kinetic, structural, and materials synthesis experiments and associated concepts, data analysis, and presentation.

**Requisites:** Declared in Materials Science and Engineering or Applied Mathematics, Physics and Engineering) and M S & E 351 and 360

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 362 – MATERIALS LABORATORY III**

3 credits.

Experiments in the mechanical and electronic properties of matter in bulk and thin films; computer instrument control; and data analysis.

**Requisites:** M S & E 361

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 363 – BASIC MATERIALS CHARACTERIZATION TECHNIQUES**

2 credits.

The purpose of this course is to familiarize students with a variety of modern characterization techniques. Three general subject areas are covered: Physical Properties: Thermogravimetric analysis (TGA); differential scanning calorimetry (DSC); dynamic mechanical analysis (DMA); gel permeation chromatography (GPC). Spectroscopy, optical and x-ray: Ultraviolet/visible (VIS), molecular-infrared/Raman, Rheology; x-ray crystal and powder diffraction. Microscopy: scanning electron microscopy (SEM); SEM and energy dispersive analysis (EDS).

**Requisites:** Declared in Materials Science and Engineering or Applied Mathematics, Physics and Engineering) and M S & E 351 and 360

**Repeatable for Credit:** No

**M S & E 401 – SPECIAL TOPICS IN MATERIALS SCIENCE AND ENGINEERING**

1-3 credits.

Special topics of interest to students in materials science and engineering.

**Requisites:** M S & E 350, 351, or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E/CHEM 421 – POLYMERIC MATERIALS**

3 credits.

Polymer chemistry and physics terminologies, structure-property relationship, polymer characterization, polymer synthesis, material requirements for optoelectronics including conjugated polymers, thin film transistors, light emitting diodes, non-linear optical materials, holographic data storage and liquid crystal polymers.

**Requisites:** CHEM 341, 343, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E/N E 423 – NUCLEAR ENGINEERING MATERIALS**

3 credits.

Fundamentals of fuel and cladding behavior in terms of thermal properties, chemical behavior and radiation damage.

**Requisites:** M S & E 350 or 351, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E/N E 433 – PRINCIPLES OF CORROSION**

3 credits.

Thermodynamics and kinetics of metallic corrosion. The common forms of corrosion and corrosion susceptibility tests. Electrochemical measurement of corrosion rates. Corrosion prevention, economic considerations. High temperature oxidation and sulphidation. Corrosion case histories.

**Requisites:** M S & E 330, or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 434 – INTRODUCTION TO THIN-FILM DEPOSITION PROCESSES**

3 credits.

Introduction to major thin-film deposition techniques and properties of thin films. Evaporation, plasma assisted processes with emphasis on sputter deposition, chemical vapor deposition ion beams. Film properties and characterization methods, applications.

**Requisites:** (M S & E 330 and 351), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M S & E 441 – DEFORMATION OF SOLIDS**

3 credits.

Elastic and plastic deformation of real solids. Dislocation theory with applications to metals and alloys. Fracture, fatigue, brittle failure and methods for measuring the mechanical properties of materials.

**Requisites:** M S & E 352 or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 448 – CRYSTALLOGRAPHY AND X-RAY DIFFRACTION**

3 credits.

Crystal symmetry, projection methods, X-ray studies of structural problems in the solid state.

**Requisites:** M S & E 350 or 351, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 451 – INTRODUCTION TO CERAMIC MATERIALS**

3 credits.

Primary objectives are to: 1) analyze how atoms and ions combine to form 3D crystals and glasses; 2) examine phase equilibria to understand the driving forces for the formation of particular ceramic phases; 3) introduce and discuss the nature of defects in ceramics; 4) discuss the migration of matter and of charge in ceramics; and 5) discuss properties and processing technologies of ceramics.

**Requisites:** M S & E 352 and (M S & E 330 or concurrent enrollment), or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 456 – ELECTRONIC, OPTICAL, AND MAGNETIC PROPERTIES OF MATERIALS**

3 credits.

Quantitative description of electronic, optical, and magnetic structure-property relationships of materials. Strategies for the development of new materials and introduction to applications of these materials.

**Requisites:** (M S & E 350 or 351) and (PHYSICS 202, 208, 248, or PHYSICS/E C E/PHYSICS 235), graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 460 – INTRODUCTION TO COMPUTATIONAL MATERIALS SCIENCE AND ENGINEERING**

3 credits.

An introduction to the theoretical and computational tools for computational materials, with hands on homework and laboratories. Topics may include atomistic simulation (e.g., molecular dynamics), mesoscale simulation (e.g., Phase field method), macroscale simulation (e.g., finite element method), thermodynamic and kinetic modeling (CALPHAD method), informatics (e.g., machine learning), and special topics (e.g., solar cell design, electronic device simulation, etc.)

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 461 – ADVANCED METAL CASTING**

3 credits.

Metallurgical and engineering principles applied in the foundry and related industries, primarily for those interested in foundry engineering.

**Requisites:** M S & E 350 or 352, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E/M E 462 – WELDING METALLURGY**

3 credits.

Metallurgical principles applied to welding; mechanisms of strengthening, phase equilibria, and microstructure of the weld zone. Modern processes including laser and electron beam welding.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M S & E 463 – MATERIALS FOR ELEVATED TEMPERATURE SERVICE**

3 credits.

The design, properties, processing and selection of high temperature materials for structural applications. The fundamentals of diffusion, phase transformations, dislocation motion and oxidation governing the high temperature mechanical properties and structural performance of metallic and ceramic materials.

**Requisites:** M S & E 352, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**M S & E 465 – FUNDAMENTALS OF HEAT TREATMENT**

3 credits.

Principles of phase transformations, heat transfer and mechanical properties as applied to heat treatment practice. The design, modeling and analysis of heat treatment processes.

**Requisites:** M S & E 352, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M S & E 470 – CAPSTONE PROJECT I**

1 credit.

Capstone experiences in materials design, selection, and application for MSE students. Emphasis on creativity and application of fundamental principles of public identification, experimental design, data acquisition and analysis, and presentation of results.

**Requisites:** Declared in Materials Science and Engineering, M S & E 352, 362, and (M S & E 331, 421, 441, 451, or 456)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 471 – CAPSTONE PROJECT II**

3 credits.

Capstone experiences in materials design, selection and application for MSE students. Emphasis on creativity and application of fundamental principles in problem identification, experimental design, data acquisition and analysis, and presentation of results.

**Requisites:** M S & E 470

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E/CIV ENGR/G L E/GEOSCI 474 – ROCK MECHANICS**

3 credits.

Classification of rock masses, stress and strain in rock, linear and non-linear behavior of rock, failure mechanisms, state of stress in rock masses, lab testing, geological and engineering applications.

**Requisites:** E M A 201, PHYSICS 201, 207, or 247, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 521 – ADVANCED POLYMERIC MATERIALS**

3 credits.

This course is directed at graduate and advanced undergraduates with focused interest in polymeric materials. Basic principles of compatibility between macromolecules and small molecules, physical chemistry of blends and concepts in phase separation, and selected topics on materials design using self-assembly concepts.

**Requisites:** M S E/CHEM/M S & E 421, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 530 – THERMODYNAMICS OF SOLIDS**

3 credits.

Thermodynamics of condensed matters as applied to materials science and engineering.

**Requisites:** M S & E 330, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E/E M A 541 – HETEROGENEOUS AND MULTIPHASE MATERIALS**

3 credits.

Principles of the mechanics of solid multiphase systems. Role of heterogeneity and anisotropy in determining physical properties including elastic, dielectric and piezoelectric properties. Applications in lightweight structures, ultrastrong materials, materials for protection of the body, and materials for the replacement of human tissues. Materials with fibrous, lamellar, particular, and cellular structures. Heterogeneous materials of biological origin. Biomimetic and bio-inspired materials.

**Requisites:** E M A 303, M E 306, or M S & E 441, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 550 – MATERIALS FUNDAMENTALS**

3 credits.

Accelerated introduction to foundational materials concepts and the materials paradigm approach to problem solving and research. Atomic scale structure of materials; defects in crystalline materials; alloy phase diagrams, solid-state diffusion, phase transformations, microstructure development, micro/nano/atomic-scale structure-property relationships.

**Requisites:** Graduate/professional standing. Not open to students with credit in M S & E 350, 351, or 352.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No



**M S & E 551 – STRUCTURE OF MATERIALS**

3 credits.

Atomic, nanoscale and microscale structure of materials. Course is designed for first year graduate students with interests in materials research.

**Requisites:** M S & E 451, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 553 – NANOMATERIALS & NANOTECHNOLOGY**

3 credits.

The principal objectives of the course are to: i) introduce advanced processing methods for synthesizing nanomaterials, ranging from single nanoparticles to three-dimensional nanostructures, ii) discuss important thermodynamic and kinetic theories related to such processing, iii) describe methods for characterizing the structure and properties of nanomaterials, iv) discuss current and emerging applications for nanomaterials, and v) illustrate the interdisciplinary nature of nanotechnology and address critical challenges.

**Requisites:** M S & E 350, 351, or CBE 440, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 560 – FUNDAMENTALS OF ATOMISTIC MODELING**

3 credits.

Introduction to basic concepts of atomistic modeling in materials, including classical and quantum mechanical energy methods, energy optimization, molecular statistics, molecular dynamics, and Monte Carlo. Relevant aspects of thermodynamics, statistical mechanics, quantum mechanics, and computer programming will also be presented.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**M S & E 570 – PROPERTIES OF SOLID SURFACES**

3 credits.

Introduction to structure and electronic properties; surface energy; thermodynamics of surfaces; diffusion. Surface barriers, work function, vibrational and electronic states. Chemical interactions: chemisorption, oxidation, corrosion, absorption kinetics, catalysis. Experimental methods and applications in metals, semiconductors.

**Requisites:** PHYSICS 205, 241, 244, or (M S & E 351 and 333) or E C E/PHYSICS/E C E 235, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M S & E 648 – ADVANCED X-RAY SCATTERING METHODS IN MATERIALS SCIENCE AND ENGINEERING**

3 credits.

Advanced concepts and methods for the use of x-ray scattering, diffraction, and spectroscopy in materials science and engineering. Underpinning fundamental mathematical and scattering concepts, including kinematic and dynamical diffraction, diffuse scattering, and optical coherence in x-ray scattering. Practical aspects of experiments at synchrotron light sources and free electron lasers. Applications, including structure of metals and ceramics, polymeric materials, thin films and nanostructures, and magnetic materials.

**Requisites:** M S & E 448, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 660 – MESOSCALE MODELING OF MATERIALS**

3 credits.

Classical theories, analytical and numerical modeling of various kinetic processes in materials. Including but not limited to transport, grain growth, phase separation, solidification, precipitation, chemical reactions, and multiphysics problems involving electrical, optical, mechanical, and magnetic properties of materials.

**Requisites:** (MATH 319, 320, or 376) and (M S E 350, 351, or CBE 440), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 699 – INDEPENDENT STUDY**

1-4 credits.

Courses in Metallurgical Engineering.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**M S & E 748 – STRUCTURAL ANALYSIS OF MATERIALS**

3 credits.

Introduction to transmission electron microscopy of materials, including imaging, diffraction, and microanalysis. Knowledge of diffraction [such as M S & E 448] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 750 – IMPERFECTIONS AND MECHANICAL PROPERTIES**

3 credits.

Mathematical theory of dislocations and other crystal imperfections; mechanical properties of crystals in relation to imperfections. Knowledge of crystal structure and dislocations [such as M S & E 551] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**M S & E 752 – ADVANCED MATERIALS SCIENCE: PHASE TRANSFORMATIONS**

3 credits.

Phase transformations, nucleation theory and the role of structural imperfections, alloy phase equilibria, interface reactions and growth kinetics, continuous transformations. Knowledge of diffusion and reactions [such as M S & E 352] required.

**Requisites:** (M S & E 530 or concurrent enrollment) and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M S & E 756 – STRUCTURE AND PROPERTIES OF ADVANCED ELECTRONIC MATERIALS**

3 credits.

Prepares graduate students for research in electronic materials and related areas by examining (1) how does the physical structure of a material affect its electronic structure and properties: and (2) state-of-the-art advance electronic materials. Topics include: molecular and organic semiconductors; carbon nanomaterials (nanotubes, nanoribbons and graphene); advances in conventional bulk zinc-blende and wurtzite semiconductors; polycrystalline, amorphous, and disordered materials; state-of-the-art high- low-k dielectrics; and up-and-coming and next-generation materials. Knowledge of solid state physics [such as PHYSICS 551 or M S & E 456] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M S & E 758 – TRANSMISSION ELECTRON MICROSCOPY LABORATORY**

1 credit.

An introduction to the practice of transmission electron microscopy (TEM) and TEM sample preparation through hands-on laboratory training.

**Requisites:** M S & E 748 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M S & E 760 – MOLECULAR MODELING OF MATERIALS**

3 credits.

Hands-on experience in modern tools of atomic and molecular modeling, including density functional theory, interatomic potentials, and molecular dynamics. Select additional/advanced techniques like high-throughput calculations, (Kinetic) Monte Carlo, accelerated molecular dynamics, and machine learning.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M S & E 790 – MASTER'S RESEARCH OR THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Materials Science and Engineering M.S., Ph.D., or doctoral minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 803 – SPECIAL TOPICS IN MATERIALS SCIENCE**

1-3 credits.

Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 890 – PRE-DISSERTATOR'S RESEARCH**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Materials Science and Engineering Ph.D. or doctoral minor.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 900 – MATERIALS RESEARCH SEMINAR**

1 credit.

Introduces graduate students to the breadth, wealth and practices of materials research at the University of Wisconsin and in the professional materials research community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 990 – RESEARCH AND THESIS**

1-9 credits.

Under faculty supervision.

**Requisites:** Declared in Materials Science and Engineering Ph.D. or doctoral minor.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M S & E 999 – INDEPENDENT WORK**

1-3 credits.

Independent study under faculty supervision.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2000

## MATHEMATICS (MATH)

**MATH 96 – PREPARATORY ALGEBRA**

3 credits.

Covers the necessary mathematical tools needed to succeed in our algebra course and provides fundamental mathematical skills. Topics include real numbers, linear equations and inequalities, integral and fractional exponents, polynomials and their arithmetic, polynomial equations and equations with fractional exponents, the quadratic formula and completing the square, systems of two linear equations, graphing, and problem solving using algebra and graphs. All students must pass an assessment on basic mathematical skills to complete the course. The course does not count for degree credit.

**Requisites:** Placement into MATH 96. Department consent required to drop/swap from course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 112 – ALGEBRA**

3 credits.

Properties of elementary functions, such as polynomial, absolute value, radical, rational, exponential, and logarithmic functions. Topics include equations, inequalities, functions, and their graphs. Students will formulate, analyze, solve, and interpret mathematical and real-world problems. Intended to provide the algebra skills required for calculus.

**Requisites:** MATH 96 or placement into MATH 112. MATH 118 does not fulfill the requisite

**Course Designation:** Gen Ed - Quantitative Reasoning Part A Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 113 – TRIGONOMETRY**

3 credits.

Covers the graphs, properties and geometric significance of trigonometric functions of a real variable. Other topics include trigonometric equations and identities, application, trigonometric form of complex numbers, DeMoivre's theorem, and polar and parametric equations. The course also has a significant number of applications, especially related to other disciplines.

**Requisites:** MATH 112 or placement into MATH 113

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 114 – ALGEBRA AND TRIGONOMETRY**

5 credits.

The two semester sequence MATH 112-MATH 113 covers similar material as MATH 114, but in a slower pace. Not recommended for students with less than an AB in MATH 96.

**Requisites:** MATH 96 or placement into MATH 114. MATH 118 does not fulfill the requisite

**Course Designation:** Gen Ed - Quantitative Reasoning Part A Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 118 – SUMMER COLLEGIATE EXPERIENCE MATHEMATICS COURSE**

2 credits.

A preparation and introductory math course for students enrolled in the Summer Collegiate Experience program. Includes material from precalculus and calculus and related topics depending on students' results on the math placement exam.

**Requisites:** Enrolled in the Summer Collegiate experience program

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2016

**MATH 141 – QUANTITATIVE REASONING AND PROBLEM SOLVING**  
3 credits.

Develops a habit of mind, competency, and comfort in working with numerical data. Learn to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations, develop the ability to reason mathematically, and make and evaluate logical arguments supported by quantitative evidence. This course is for students who need to satisfy part A of the Quantitative Reasoning requirement and prepare for QR-B courses, but do not want to continue in the calculus sequence.

**Requisites:** MATH 96 or placement into MATH 141. MATH 118 does not fulfill the requisite

**Course Designation:** Gen Ed – Quantitative Reasoning Part A  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 171 – CALCULUS WITH ALGEBRA AND TRIGONOMETRY I**  
5 credits.

Topics in algebra, trigonometry and precalculus are integrated with elementary differential calculus. Part of a 2-semester sequence with MATH 217; these two courses together are equivalent to MATH 114 and 221.

**Requisites:** MATH 96 or placement into MATH 171. MATH 118 does not fulfill the requisite

**Course Designation:** Gen Ed – Quantitative Reasoning Part A  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 198 – DIRECTED STUDY**  
1-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2012

**MATH 207 – TOPICS IN MATHEMATICS STUDY ABROAD**  
1-5 credits.

Credit is awarded to students who have completed an appropriate math course abroad at the intermediate level having no direct equivalence within the math department offerings. The study abroad course must be pre-approved by the math department.

**Requisites:** None

**Course Designation:** Breadth – Natural Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**MATH 211 – CALCULUS**  
5 credits.

Essential concepts of differential and integral calculus; exponential and logarithmic functions; functions of several variables. Primarily for students in prebusiness and some social sciences. Students preparing for advanced study in mathematics, physics, engineering and other sciences should take MATH 221, 222 and 234 rather than MATH 210, 211 and 213. Most students in the biological sciences should take MATH 221. MATH 210 does not fulfill the requisite.

**Requisites:** MATH 112 or 114 or placement into MATH 211

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 213 – CALCULUS AND INTRODUCTION TO DIFFERENTIAL EQUATIONS**  
3 credits.

Techniques of integration, multiple integrals, infinite sequences and series, first order differential equations, two-dimensional systems of differential equations, difference equations, with models from and applications in business and the social and biological sciences.

**Requisites:** MATH 211, 217, 221, or 275

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 217 – CALCULUS WITH ALGEBRA AND TRIGONOMETRY II**  
5 credits.

Continuation of MATH 171. Topics in algebra, trigonometry and precalculus are integrated with elementary differential calculus. Completion of MATH 217 implies completion of MATH 221 and 114.

**Requisites:** MATH 171

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 221 – CALCULUS AND ANALYTIC GEOMETRY I**  
5 credits.

Introduction to differential and integral calculus and plane analytic geometry; applications; transcendental functions.

**Requisites:** MATH 114 or (MATH 112 and 113) or placement into MATH 221. MATH 211 or MATH 213 does not fulfill the requisite.

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 222 – CALCULUS AND ANALYTIC GEOMETRY 2**

4 credits.

Techniques of integration, improper integrals, first order ordinary differential equations, sequences and series, Taylor series, vector geometry in two and three dimensions.

**Requisites:** MATH 217, 221, or 275. MATH 211 or 213 does not fulfill the requisite.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 228 – WES CALCULUS SUPPLEMENT**

2 credits.

Topics in algebra, trigonometry, differential, integral and multi-variable calculus and analytic geometry will be covered depending on which calculus course MATH 228 is attached to. MATH 228 must be taken in conjunction with the appropriate WES section of MATH 171, 217, 221, 222, or 234.

**Requisites:** Member of Wisconsin Emerging Scholars--MATH Program

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH 234 – CALCULUS--FUNCTIONS OF SEVERAL VARIABLES**

4 credits.

Introduction to calculus of functions of several variables; calculus on parameterized curves, derivatives of functions of several variables, multiple integrals, vector calculus.

**Requisites:** MATH 222 or 276

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI 240 – INTRODUCTION TO DISCRETE MATHEMATICS**

3 credits.

Basic concepts of logic, sets, partial order and other relations, and functions. Basic concepts of mathematics (definitions, proofs, sets, functions, and relations) with a focus on discrete structures: integers, bits, strings, trees, and graphs. Propositional logic, Boolean algebra, and predicate logic. Mathematical induction and recursion. Invariants and algorithmic correctness. Recurrences and asymptotic growth analysis. Fundamentals of counting.

**Requisites:** MATH 217, 221, or 275

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 275 – TOPICS IN CALCULUS I**

5 credits.

Topics in first semester calculus. This is the first semester of the calculus honors sequence. Course is available by invitation only for freshmen students who placed into MATH 221.

**Requisites:** Consent of instructor

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**MATH 276 – TOPICS IN CALCULUS II**

5 credits.

Topics in second semester calculus. This is the second semester of the calculus honors sequence.

**Requisites:** MATH 275

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**MATH 298 – DIRECTED STUDY IN MATHEMATICS**

1-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH/STAT 309 – INTRODUCTION TO PROBABILITY AND MATHEMATICAL STATISTICS I**

3 credits.

Probability and combinatorial methods, discrete and continuous, univariate and multivariate distributions, expected values, moments, normal distribution and derived distributions, estimation.

**Requisites:** MATH 234, 376, or concurrent enrollment. Not open to students with credit for MATH/STAT/MATH 431 or STAT 311

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/STAT 310 – INTRODUCTION TO PROBABILITY AND MATHEMATICAL STATISTICS II**

3 credits.

Mathematical statistical inference aims at providing an understanding of likelihood's central role to statistical inference, using the language of mathematical statistics to analyze statistical procedures, and using the computer as a tool for understanding statistics. Specific topics include: samples and populations, estimation, hypothesis testing, and theoretical properties of statistical inference.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, MATH/STAT/MATH 431, or MATH 531) and (STAT 240, STAT 301, STAT 302, STAT 324, STAT 371, or ECON 310), or graduate/professional standing

**Course Designation:** Breadth - Natural Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 319 – TECHNIQUES IN ORDINARY DIFFERENTIAL EQUATIONS**

3 credits.

Review of linear differential equations; series solution of linear differential equations; boundary value problems; Laplace transforms; possibly numerical methods and two dimensional autonomous systems.

**Requisites:** MATH 222, 276 or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 320 – LINEAR ALGEBRA AND DIFFERENTIAL EQUATIONS**

3 credits.

An introduction to linear algebra and differential equations with emphasis on the relationship between the theory of linear algebra and analytical and numerical techniques for solving differential equations. Linear algebra topics include linear systems, matrices and their algebra, vector spaces and linear transformations, eigenvalues and eigenvectors. Topics from differential equations include first order ODE, homogeneous and nonhomogeneous linear systems, and numerical methods.

**Requisites:** MATH 222, 276 or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 321 – APPLIED MATHEMATICAL ANALYSIS**

3 credits.

Vector analysis: algebra and geometry of vectors, vector differential and integral calculus, theorems of Green, Gauss, and Stokes; complex analysis: analytic functions, complex integrals and residues, Taylor and Laurent series.

**Requisites:** MATH 376, (MATH 234 and 319), (MATH 234 and 320), (MATH 234 and 340), (MATH 234 and 341), (MATH 234 and 375), or graduate/professional standing

**Course Designation:** Breadth - Natural Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 322 – APPLIED MATHEMATICAL ANALYSIS**

3 credits.

Sturm-Liouville theory; Fourier series, including mean convergence; boundary value problems for linear second order partial differential equations, including separation of variables and eigenfunction expansions.

**Requisites:** MATH 321 or 376 or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 331 – INTRODUCTORY PROBABILITY**

3 credits.

Topics covered include axioms of probability, random variables, the most important discrete and continuous probability distributions, expectation and variance, conditional probability and conditional expectations, Markov's and Chebyshev's inequalities, laws of large numbers, and the central limit theorem. Course includes a brief introduction to techniques of multivariate integration.

**Requisites:** MATH 222

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2013

**MATH 340 – ELEMENTARY MATRIX AND LINEAR ALGEBRA**

3 credits.

An introduction to linear algebra. Topics include matrix algebra, linear systems of equations, vector spaces, sub-spaces, linear dependence, span, basis, rank of matrices, determinants, linear transformations, coordinate representations, kernel, range, eigenvalues and eigenvectors, diagonalization, inner products and orthogonal vectors, symmetric matrices. Covers linear algebra topics in greater depth and detail than MATH 320. Formal techniques in mathematical argument [MATH 341] not covered.

**Requisites:** MATH 222

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**MATH 341 – LINEAR ALGEBRA**

3 credits.

The theory of linear algebra with an introduction to proofs and proof writing. Topics include vector spaces, linear dependence, span, basis, linear transformations, kernel, image, inner products and inner product spaces, geometry, eigenvalues, eigenvectors, standard matrix factorizations. Other content includes basic set theory, logical operations, quantifiers, direct and indirect arguments, and induction. Differential equations [MATH 320] not covered.

**Requisites:** MATH 234**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 375 – TOPICS IN MULTI-VARIABLE CALCULUS AND LINEAR ALGEBRA**

5 credits.

Vector spaces and linear transformations, differential calculus of scalar and vector fields, determinants, eigenvalues and eigenvectors, multiple integrals, line integrals, and surface integrals. Freshmen students are invited to enroll by the Department of Mathematics.

**Requisites:** Consent of Instructor**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MATH 376 – TOPICS IN MULTI-VARIABLE CALCULUS AND DIFFERENTIAL EQUATIONS**

5 credits.

Topics in multi-variable calculus and introduction to differential equations.

**Requisites:** MATH 375**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 390 – UNDERGRADUATE RESEARCH WITH MADISON EXPERIMENTAL MATHEMATICS LAB**

3 credits.

An introduction to mathematical research. Instruction in ancillary skills such as literature review, mathematical software use, technical writing and communication, etc. Requires acceptance to the Madison Experimental Mathematics undergraduate research lab.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 407 – TOPICS IN MATHEMATICS STUDY ABROAD**

1-5 credits.

Credit is awarded to students who have completed an appropriate math course abroad at the advanced level having no direct equivalence within the math department offerings. The study abroad course must be pre-approved by the math department.

**Requisites:** None**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**MATH 415 – APPLIED DYNAMICAL SYSTEMS, CHAOS AND MODELING**

3 credits.

An introduction to nonlinear dynamical systems including stability, bifurcations and chaos. The course will give underlying mathematical ideas, but emphasize applications from many scientific fields.

**Requisites:** MATH 376, (MATH 234 and 319), (MATH 234 and 320), (MATH 234 and 340), (MATH 234 and 341) or (MATH 234 and 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MATH 421 – THE THEORY OF SINGLE VARIABLE CALCULUS**

3 credits.

Covers material in first and second semester calculus but it is intended to teach math majors to write and understand proofs in mathematics in general and in calculus in particular.

**Requisites:** MATH 234 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH/COMP SCI/ISYE 425 – INTRODUCTION TO COMBINATORIAL OPTIMIZATION**

3 credits.

Focuses on optimization problems over discrete structures, such as shortest paths, spanning trees, flows, matchings, and the traveling salesman problem. We will investigate structural properties of these problems, and we will study both exact methods for their solution, and approximation algorithms.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

**MATH/STAT 431 – INTRODUCTION TO THE THEORY OF PROBABILITY**

3 credits.

Topics covered include axioms of probability, random variables, the most important discrete and continuous probability distributions, expectation and variance, moment generating functions, conditional probability and conditional expectations, multivariate distributions, Markov's and Chebyshev's inequalities, laws of large numbers, and the central limit theorem.

**Requisites:** MATH 234 or 376 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI/E C E 435 – INTRODUCTION TO CRYPTOGRAPHY**

3 credits.

Cryptography is the art and science of transmitting digital information in a secure manner. Provides an introduction to its technical aspects.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 441 – INTRODUCTION TO MODERN ALGEBRA**

3 credits.

The integers, emphasizing general group and ring properties. Permutation groups, symmetry groups, polynomial rings, leading to notions of abstract groups and rings. Congruences, computations, including finite fields and applications. Emphasis on concepts and concrete examples and computations.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**MATH 443 – APPLIED LINEAR ALGEBRA**

3 credits.

Review of matrix algebra. Simultaneous linear equations, linear dependence and rank, vector space, eigenvalues and eigenvectors, diagonalization, quadratic forms, inner product spaces, norms, canonical forms. Discussion of numerical aspects and applications in the sciences.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 444 – GRAPHS AND NETWORKS IN DATA SCIENCE**

3 credits.

Mathematical foundations of networks with an emphasis on their applications in modern data science, using tools from algorithmic graph theory and linear algebra. Topics include: basics of graph theory, network statistics, graph traversal algorithms and implementation, matrix methods, community detection, PageRank, simulation of random graph models.

**Requisites:** (MATH 320, 340, 341, or 375) and (COMP SCI 200, 220, 300, 310, 320, or placement in COMP SCI 300), graduate/professional standing, or declared in Mathematics VISP (undergraduate or graduate)

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**MATH 461 – COLLEGE GEOMETRY I**

3 credits.

An introduction to Euclidean or non-Euclidean geometry.

**Requisites:** MATH 234 or (MATH 222 and MATH/COMP SCI/MATH 240) or MATH 375 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 467 – INTRODUCTION TO NUMBER THEORY**

3 credits.

An introduction to proof writing techniques through a study of classical topics in elementary number theory. Topics include the divisibility, basic properties of primes, congruences, Fermat's theorem.

**Requisites:** MATH 234, 375, (222 and MATH/COMP SCI/MATH 240), (222 and 320), or (222 and 340)

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH/CURRIC 471 – MATHEMATICS FOR SECONDARY SCHOOL TEACHERS**

3 credits.

Capstone for future middle and high school teachers, drawing connections between higher mathematics and school mathematics.

**Requisites:** (MATH 341, 375, or 421) and (MATH 461 or concurrent enrollment)

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/HIST SCI 473 – HISTORY OF MATHEMATICS**

3 credits.

An historical survey of the main lines of mathematical development.

**Requisites:** Consent of instructor**Course Designation:** Breadth – Either Humanities or Natural Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH/COMP SCI/STAT 475 – INTRODUCTION TO COMBINATORICS**

3 credits.

Problems of enumeration, distribution, and arrangement. Inclusion-exclusion principle. Generating functions and linear recurrence relations. Combinatorial identities. Graph coloring problems. Finite designs. Systems of distinct representatives and matching problems in graphs. Potential applications in the social, biological, and physical sciences. Puzzles. Problem solving.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Breadth – Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 490 – UNDERGRADUATE SEMINAR**

1-3 credits.

Intermediate or upper level topics course in mathematics. Topics vary.

**Requisites:** Consent of instructor**Course Designation:** Breadth – Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 491 – TOPICS IN UNDERGRADUATE MATHEMATICS**

3 credits.

Intermediate or upper level topics course in mathematics. Topics vary.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**MATH/COMP SCI 513 – NUMERICAL LINEAR ALGEBRA**

3 credits.

Direct and iterative solution of linear and nonlinear systems and of eigenproblems. LU and symmetric LU factorization. Complexity, stability, and conditioning. Nonlinear systems. Iterative methods for linear systems. QR-factorization and least squares. Eigenproblems: local and global methods.

**Requisites:** (MATH 340, 341, or 375) and (COMP SCI 200, 300, 301, 302, 310, or placement into COMP SCI 300) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) program**Course Designation:** Breadth – Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH/COMP SCI 514 – NUMERICAL ANALYSIS**

3 credits.

Polynomial forms, divided differences. Polynomial interpolation. Polynomial approximation: uniform approximation and Chebyshev polynomials, least-squares approximation and orthogonal polynomials. Numerical differentiation and integration. Splines, B-splines and spline approximation. Numerical methods for solving initial and boundary value problems for ordinary differential equations.

**Requisites:** (MATH 320, 340, 341, or 375), (MATH 322, 376, 421, or 521), and (COMP SCI 200, 220, 300, 310, or 301 prior to Spring 2020, or placement into COMP SCI 300); grad/professional standing; member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Breadth – Natural Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 519 – ORDINARY DIFFERENTIAL EQUATIONS**

3 credits.

Provides a rigorous introduction to ordinary differential equations and dynamical systems. Intended for math majors and advanced (or graduate) students in other disciplines.

**Requisites:** (MATH 320, 340, 341, or 375) and (MATH 322, 376, 421, or 521) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**MATH 521 – ANALYSIS I**

3 credits.

The real numbers, elements of set theory, metric spaces and basic topology, sequences and series, limits, continuity, differentiation, integration, sequences and series of functions, uniform convergence.

**Requisites:** (MATH 234 and 467) or (MATH 322, 341, 376, 421) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 522 – ANALYSIS II**

3 credits.

Special functions, power series, Fourier series, approximation, contraction principle, characterizations of compactness in metric spaces, applications to differential equations. Differential calculus in normed spaces, including implicit and inverse function theorems. Course is essential for graduate work in mathematics.

**Requisites:** MATH 521 and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI/ISYE/STAT 525 – LINEAR OPTIMIZATION**

3 credits.

Introduces optimization problems whose constraints are expressed by linear inequalities. Develops geometric and algebraic insights into the structure of the problem, with an emphasis on formal proofs. Presents the theory behind the simplex method, the main algorithm used to solve linear optimization problems. Explores duality theory and theorems of the alternatives.

**Requisites:** MATH 320, 340, 341, 375, or 443 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 531 – PROBABILITY THEORY**

3 credits.

A rigorous introduction to probability theory at an advanced undergraduate level. Only a minimal amount of measure theory is used, in particular, the theory of Lebesgue integrals is not needed. It is aimed at math majors and Master's degree students, or students in other fields who will need probability in their future careers. Gives an introduction to the basics (Kolmogorov axioms, conditional probability and independence, random variables, expectation) and discusses some classical results with proofs (DeMoivre-Laplace limit theorems, the study of simple random walk on the one dimensional lattice, applications of generating functions).

**Requisites:** MATH 376, 421, or 521 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 535 – MATHEMATICAL METHODS IN DATA SCIENCE**

3 credits.

A rigorous introduction to mathematical concepts important for modern data science. Topics include: matrix factorizations, optimization theory and algorithms, probabilistic models, finite Markov chains. Mathematical techniques are motivated by and illustrated on a range of applied problems from machine learning and statistics.

**Requisites:** (MATH 320, 340, 341, 375 or COMP SCI/ECE/ME/COMP SCI/ECE 532) and (MATH/STAT/MATH 309, 431, MATH 531, STAT 311 or ECE 331) and (MATH 322, 341, 375, 421, 467, or COMP SCI 577), graduate/professional standing, or member of Pre-Masters Mathematics (Visiting Intl) Prgrm

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 540 – LINEAR ALGEBRA II**

3 credits.

Review of linear transformations, duality. Diagonalization of linear transformations. The Cayley Hamilton Theorem. Minimal polynomials. The Jordan canonical form. Exponential function. Inner product spaces, orthonormal bases and Gram-Schmidt orthogonalization. Operators on inner product spaces. Self-adjoint, unitary and positive operators. Spectral theorem. singular value decomposition. Bilinear and quadratic forms. Norms, bounded linear operators, matrix norms. Basic multilinear algebra. This is a second course in linear algebra.

**Requisites:** (MATH 234 or 375), (MATH 320, 340, 341, or 375), and (MATH 341, 375, 421, 467, or 521), or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 541 – MODERN ALGEBRA**

3 credits.

Groups, normal subgroups, Cayley's theorem, rings, ideals, homomorphisms, polynomial rings, abstract vector spaces.

**Requisites:** (MATH 234 or 375), (MATH 320, 340, 341, or 375), and (MATH 341, 375, 421, 467, or 521), or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 542 – MODERN ALGEBRA**

3 credits.

Field extensions, roots of polynomials, splitting fields, simple extensions, linear transformations, matrices, characteristic roots, canonical forms, determinants.

**Requisites:** MATH 541 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 551 – ELEMENTARY TOPOLOGY**

3 credits.

Topological spaces, connectedness, compactness, separation axioms, metric spaces.

**Requisites:** (MATH 234 or 375), (MATH 320, 340, 341, or 375), and (MATH 341, 375, 421, 467, or 521), or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 552 – ELEMENTARY GEOMETRIC AND ALGEBRAIC TOPOLOGY**

3 credits.

Introduction to algebraic topology. Emphasis on geometric aspects, including two-dimensional manifolds, the fundamental group, covering spaces, basic simplicial homology theory, the Euler-Poincare formula, and homotopy classes of mappings.

**Requisites:** (MATH 551 and 541) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 561 – DIFFERENTIAL GEOMETRY**

3 credits.

Theory of curves and surfaces by differential methods.

**Requisites:** (MATH 320, 340, 341, or 375) and (MATH 322, 376, 421, or 521) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 567 – MODERN NUMBER THEORY**

3 credits.

A course in number theory covering fundamentals and modern applications in topics of recent interest: Modular arithmetic, quadratic reciprocity, arithmetic functions, zeta function, Diophantine equations, transcendental numbers, Roth's theorem, continued fractions, and the circle method. Optional material from probability including random matrix theory.

**Requisites:** MATH 541 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Honors Optional (%)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 570 – FUNDAMENTALS OF SET THEORY**

3 credits.

Introduces the basic concepts of Set Theory including: Set-theoretical paradoxes and means of avoiding them, sets, relations, functions, orders and well-orders, proof by transfinite induction and definitions by transfinite recursion, cardinal and ordinal numbers and their arithmetic, construction of the real numbers, the axiom of choice and its consequences.

**Requisites:** (MATH 234 and 467) or (MATH 341, 375, 421 or 521) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**MATH/PHILOS 571 – MATHEMATICAL LOGIC**

3 credits.

Basics of logic and mathematical proofs; propositional logic; first order logic; undecidability.

**Requisites:** (MATH 234 or 375), (MATH 320, 340, 341, or 375), and (MATH 341, 375, 421, 467, or 521), or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MATH 605 – STOCHASTIC METHODS FOR BIOLOGY**

3 credits.

Intended to provide a rigorous foundation for stochastic modeling of biological systems. The mathematical emphasis is in stochastic analysis and simulation. Biological applications include epidemiological phenomena, biochemical reaction networks and population dynamics.

**Requisites:** (MATH/STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MATH 607 – TOPICS IN MATHEMATICS STUDY ABROAD**

1-5 credits.

Credit is awarded to students who have completed an appropriate math course abroad at the advanced level having no direct equivalence within the math department offerings. The study abroad course must be pre-approved by the math department.

**Requisites:** None

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**MATH/B M I/BIOCHEM/BMOLCHEM 609 – MATHEMATICAL METHODS FOR SYSTEMS BIOLOGY**

3 credits.

Provides a rigorous foundation for mathematical modeling of biological systems. Mathematical techniques include dynamical systems and differential equations. Applications to biological pathways, including understanding of bistability within chemical reaction systems, are emphasized.

**Requisites:** MATH 415 and (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MATH 619 – ANALYSIS OF PARTIAL DIFFERENTIAL EQUATIONS**

3 credits.

A rigorous introduction to the theoretical underpinnings of the basic methods and techniques in the modern theory of PDEs. It is aimed at math majors, but will also be useful to some students in the sciences, engineering and economics who feel the need for a deeper understanding of the theory of PDEs. The emphasis is on the exposure to a number of different methods of solution of PDEs and their connection to physical phenomena modeled by the equations. The goals include both learning to solve some basic types of PDEs as well as to understand the motivation behind and inner workings of the techniques involved.

**Requisites:** (MATH 322, 421, or 521) and (MATH 319, 320, 376, 415, or 519) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 621 – INTRODUCTION TO MANIFOLDS**

3 credits.

Integration in Euclidean spaces, change of variables, multilinear algebra, vector fields and differential forms, manifolds and tangent spaces, integration on manifolds, Stokes theorem. Classical vector analysis. Cauchy integral theorem.

**Requisites:** MATH 522, (MATH 521 and 561), graduate/professional standing, or declared in Mathematics VISP

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 623 – COMPLEX ANALYSIS**

3 credits.

Elementary functions of a complex variable; conformal mapping; complex integrals; the calculus of residues.

**Requisites:** MATH 321 or 521 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 627 – INTRODUCTION TO FOURIER ANALYSIS**

3 credits.

Fourier series and integrals, and their applications.

**Requisites:** MATH 521 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**MATH 629 – INTRODUCTION TO MEASURE AND INTEGRATION**

3 credits.

Lebesgue integral and measure, abstract measure and integration, differentiation, spaces of integrable functions.

**Requisites:** MATH 522 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/ISYE/OTM/STAT 632 – INTRODUCTION TO STOCHASTIC PROCESSES**

3 credits.

Topics include discrete-time Markov chains, Poisson point processes, continuous-time Markov chains, and renewal processes. Applications to queueing, branching, and other models in science, engineering and business.

**Requisites:** (MATH/STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 635 – AN INTRODUCTION TO BROWNIAN MOTION AND STOCHASTIC CALCULUS**

3 credits.

Presents an introduction to Brownian motion and its application to stochastic calculus. Sample path properties of Brownian motion, Ito stochastic integrals, Ito's formula, stochastic differential equations and properties of their solutions, and various applications will be included.

**Requisites:** (MATH 521 and ISYE/MATH/OTM/STAT/ISYE/MATH/OTM 632) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MATH/ECE 641 – INTRODUCTION TO ERROR-CORRECTING CODES**

3 credits.

Coding theory. Codes (linear, Hamming, Golay, dual); decoding-encoding; Shannon's theorem; sphere-packing; singleton and Gilbert-Varshamov bounds; weight enumerators; MacWilliams identities; finite fields; other codes (Reed-Muller, cyclic, BCH, Reed-Solomon) and error-correction algorithms.

**Requisites:** MATH 541 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**MATH 681 – SENIOR HONORS THESIS**

3 credits.

Individual study for honors math majors writing a thesis in mathematics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 682 – SENIOR HONORS THESIS**

3 credits.

Individual study for honors math majors writing a thesis in mathematics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MATH 691 – UNDERGRADUATE THESIS**

2-4 credits.

Individual study for students writing a thesis in mathematics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2002

**MATH 692 – UNDERGRADUATE THESIS**

2-4 credits.

Individual study for students writing a thesis in mathematics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**MATH 698 – DIRECTED STUDY**

1-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 703 – METHODS OF APPLIED MATHEMATICS 1**

3 credits.

Study of the linear algebraic structure underlying discrete equilibrium problems. Boundary value problems for continuous equilibria: Sturm-Liouville equations, Laplace's equation, Poisson's equation, and the equations for Stokes flow. Contour integration and conformal mapping. Applications of dynamics leading to initial value problems for ODEs and PDEs. Green's functions for ODEs and introduction to asymptotic methods for ODEs, e.g. WKB analysis. Separation of variables and eigenfunction expansions for linear PDEs. Examples from physics and engineering throughout. Knowledge of undergraduate linear algebra, analysis and complex analysis is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MATH 704 – METHODS OF APPLIED MATHEMATICS-2**

3 credits.

Derivation, nature and solution of canonical partial differential equations of applied mathematics. Conservation laws, advection, diffusion. First order PDEs, characteristics, shocks. Traffic flow, eikonal and Hamilton-Jacobi equations. Higher order PDEs: classification, Fourier analysis, well-posedness. Series solutions and integral transforms. Green's functions and distributions. Similarity solutions. Asymptotics of Fourier integrals. Laplace's method, stationary phase. Ship waves. Perturbation methods. Knowledge of undergraduate linear algebra, analysis and complex analysis is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 705 – MATHEMATICAL FLUID DYNAMICS**

3 credits.

Advanced introduction to fluid dynamics. Basic concepts; elementary viscous flow; Navier-Stokes equations. Elementary airfoil theory; boundary layers. Vortex motion. Waves. Very viscous flow. Compressible flows. Instabilities, bifurcations, turbulence. Requires working knowledge of multivariate calculus, differential equations and mechanics.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**MATH/STAT 709 – MATHEMATICAL STATISTICS**

4 credits.

Introduction to measure theoretic probability; derivation and transformation of probability distributions; generating functions and characteristic functions; conditional expectation, sufficiency, and unbiased estimation; methods of large sample theory including laws of large numbers and central limit theorems; order statistics.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MATH/STAT 710 – MATHEMATICAL STATISTICS**

4 credits.

Estimation, efficiency, Neyman-Pearson theory of hypothesis testing, confidence regions, decision theory, analysis of variance, and distribution of quadratic forms.

**Requisites:** MATH/STAT/MATH 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH/COMP SCI 714 – METHODS OF COMPUTATIONAL MATHEMATICS I**

3 credits.

Development of finite difference methods for hyperbolic, parabolic and elliptic partial differential equations. Analysis of accuracy and stability of difference schemes. Direct and iterative methods for solving linear systems. Introduction to finite volume methods. Applications from science and engineering. Students are strongly encouraged to have programming skills (e.g. COMP SCI 200) and some undergraduate numerical analysis (e.g. MATH/COMP SCI 514 or COMP SCI 412), analysis and differential equations (e.g. MATH 322 and MATH 521) and linear algebra (e.g. MATH 341).

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**MATH/COMP SCI 715 – METHODS OF COMPUTATIONAL MATHEMATICS II**

3 credits.

Introduction to spectral methods (Fourier, Chebyshev, Fast Fourier Transform), finite element methods (Galerkin methods, energy estimates and error analysis), and mesh-free methods (Monte-Carlo, smoothed-particle hydrodynamics) for solving partial differential equations. Applications from science and engineering. Applications from science and engineering. Students are strongly encouraged to have programming skills (e.g. COMP SCI 200), undergraduate numerical analysis (e.g. MATH/COMP SCI 514 or COMP SCI 412), analysis (MATH 322 and math 521) and linear algebra (e.g. MATH 341 or equiv.)

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 716 – ORDINARY DIFFERENTIAL EQUATIONS**

3 credits.

Existence, uniqueness, and continuous dependence theorems, linear systems, stability, singular points, and boundary value problems. Qualitative behavior of nonlinear equations, stability, Lyapunov functions, invariant manifolds, bifurcation theory, periodic orbits, and connecting orbits.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**MATH 717 – STOCHASTIC COMPUTATIONAL METHODS**

3 credits.

Introduction to computational methods that use stochastic algorithms and/or methods that are applied to random or stochastic mathematical problems. The main emphasis will be placed on learning practical tools, while some aspects of theoretical foundations will also be covered (e.g., basic error analysis for numerical solution of stochastic differential equations (SDEs), and basic convergence of Monte Carlo methods). Topics include Monte Carlo methods, Bayesian inference and Bayesian sampling, simulation of Markov chains, numerical analysis for SDEs, data assimilation / state estimation, stochastic optimization methods and random sketching. Applications to science, engineering, finance, data science, and other practical problems also included.

**Requisites:** Graduate/professional standing or declared in Mathematics Visiting International Student Program (graduate or dissertator)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 719 – PARTIAL DIFFERENTIAL EQUATIONS**

3 credits.

Classical theory of partial differential equations, together with an introduction to the modern theory based on functional analysis. Familiarity with basic measure theory (e.g. MATH 629 or 721) or concurrent registration in MATH 721 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 720 – PARTIAL DIFFERENTIAL EQUATIONS**

3 credits.

Initial value problems in partial differential equations, beginning with linear parabolic and hyperbolic equations, and continuing with nonlinear initial value problems.

**Requisites:** MATH 719 and 721

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 721 – A FIRST COURSE IN REAL ANALYSIS**

3 credits.

Real analysis concentrating on measures, integration, and differentiation and including an introduction to Hilbert spaces. Knowledge of undergraduate analysis (e.g. the sequence MATH 521 and 522) is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 722 – COMPLEX ANALYSIS**

3 credits.

The basic theory of functions of one complex variable including Cauchy formula, singularities and residues, meromorphic functions, conformal mappings, harmonic functions, approximation and the nonhomogeneous  $\bar{\partial}$ -equation. Requires knowledge of undergraduate analysis (e.g. the sequence MATH 521/522).

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 725 – A SECOND COURSE IN REAL ANALYSIS**

3 credits.

Continuation of MATH 721. An introduction to further topics in real analysis: Banach spaces, Fourier transforms, elements of distribution theory, and applications.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI/I SY E/STAT 726 – NONLINEAR OPTIMIZATION I**

3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasi-Newton methods; conjugate-gradient and limited-memory methods for large-scale problems; derivative-free optimization; algorithms for least-squares problems and nonlinear equations; gradient projection algorithms for bound-constrained problems; and simple penalty methods for nonlinearly constrained optimization. Students are strongly encouraged to have knowledge of linear algebra and familiarity with basic mathematical analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI/I SY E 728 – INTEGER OPTIMIZATION**

3 credits.

Introduces optimization problems over integers, and surveys the theory behind the algorithms used in state-of-the-art methods for solving such problems. Special attention is given to the polyhedral formulations of these problems, and to their algebraic and geometric properties. Applicability of Integer Optimization is highlighted with applications in combinatorial optimization. Key topics include: formulations, relaxations, polyhedral theory, cutting planes, decomposition, enumeration. Students are strongly encouraged to have knowledge of Linear Programming (e.g., MATH/COMP SCI/I SY E/STAT 525), including algorithms, duality and polyhedral theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH/COMP SCI/I SY E 730 – NONLINEAR OPTIMIZATION II**

3 credits.

Theory and algorithms for nonlinearly constrained optimization. Relevant geometric concepts, including tangent and normal cones, theorems of the alternative, and separation results. Constraint qualifications. Geometric and algebraic expression of first-order optimality conditions. Second-order optimality conditions. Duality. Nonlinear programming algorithms: merit functions and filters; interior-point, augmented Lagrangian, and sequential quadratic programming algorithms.

**Requisites:** COMP SCI/I SY E/MATH/STAT/COMP SCI/I SY E/MATH 726

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH/STAT 733 – THEORY OF PROBABILITY I**

3 credits.

An introduction to measure theoretic probability and stochastic processes. Topics include foundations, independence, zero-one laws, laws of large numbers, convergence in distribution, characteristic functions, central limit theorems, random walks, conditional expectations. Familiarity with basic measure theory (e.g. MATH 629 or 721) or concurrent registration in MATH 721 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH/STAT 734 – THEORY OF PROBABILITY II**

3 credits.

Continuation of MATH/STAT 733. Possible topics include martingales, weak convergence of measures, introduction to Brownian motion.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH 735 – STOCHASTIC ANALYSIS**

3 credits.

Foundations of continuous time stochastic processes, semimartingales and the semimartingale integral, Ito's formula, stochastic differential equations, stochastic equations for Markov processes, application in finance, filtering, and control. The course relies on measure theoretic probability theory that can be reviewed at the beginning of the semester.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 740 – ENUMERATIVE COMBINATORICS/SYMMETRIC FUNCTIONS**

3 credits.

Inclusion-exclusion principle, permutation statistics, sieve methods, unimodal sequences, posets, lattice theory, Mobius functions, generating functions, bases and transition matrices for symmetric functions, Young tableaux, plane partitions, polytopes, poset homology, Stanley-Reisner rings.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**MATH 741 – ABSTRACT ALGEBRA**

3 credits.

Usually a study of finite groups and noncommutative rings. Group theoretic topics may include: permutation groups, Lagrange's theorem, Cauchy's theorem and the Sylow theorems, solvable and nilpotent groups. Ring theoretic topics may include: Artinian rings and modules, the Wedderburn theorems, the Hopkins-Levitzki theorem, the Jacobson radical and density theorem. The basic prerequisite for all advanced graduate courses in algebra. Familiarity with topics in undergraduate algebra (e.g. MATH 541 and 542) is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 742 – ABSTRACT ALGEBRA**

3 credits.

Continuation of MATH 741. Usually the study of commutative rings and fields. Ring theoretic topics may include: modules over PIDs, Noetherian rings and the Hilbert basis theorem, the Lasker-Noether theorem, the Krull intersection theorem, integrality and the Hilbert Nullstellensatz. Field theoretic topics may include: algebraic extensions, Galois theory, solvability of polynomials and classical constructability problems.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 746 – TOPICS IN RING THEORY**

3 credits.

Will alternate between commutative and noncommutative ring theory. Commutative topics include localization; local rings; dimension theory; Cohen-Macaulay rings. Noncommutative topics include projective modules; injective modules; flat modules; homological and global dimension; Wedderburn and Goldie rings. Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MATH 747 – LIE ALGEBRAS**

3 credits.

Lie algebras and matrix groups. Topics: tangent spaces; exponentials; Baker-Campbell-Hausdorff formula; (nilpotent, solvable, semisimple) Lie algebras; Engel's and Lie's theorems; Levi decomposition; Killing form;  $\mathfrak{sl}(2)$ -representations; root systems; Dynkin diagrams; Weyl groups; Cartan and Borel subalgebras; Serre's theorem. Basic graduate algebra courses (e.g. MATH 541 and 542 or MATH 741 and 742) are strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**MATH 748 – ALGEBRAIC NUMBER THEORY**

3 credits.

A rigorous introduction to the arithmetic of number fields; algebraic integers, geometry of numbers, Dirichlet's Unit Theorem, ideal class groups, first case of Fermat's Last Theorem; prime decompositions, Galois automorphisms. Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 749 – ANALYTIC NUMBER THEORY**

3 credits.

An introduction to (abelian) Hecke L-functions and their arithmetic applications to topics such as the distribution of primes and the study of ideal class groups. Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**MATH 750 – HOMOLOGICAL ALGEBRA**

3 credits.

Topics include: complexes, cohomology, double complexes, spectral sequences; abelian categories, derived categories, derived functors; Tor and Ext, Koszul complexes; group cohomology; sheaf cohomology, hypercohomology. Basic graduate algebra courses (e.g. MATH 741 and 742) are strongly recommended

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 751 – INTRODUCTORY TOPOLOGY I**

3 credits.

An introduction to algebraic and differential topology. Elements of homotopy theory, fundamental group, covering spaces. Differentiable manifolds, tangent vectors, regular values, transversality, examples of compact Lie groups. Homological algebra, chain complexes, cell complexes, singular and cellular homology, calculations for surfaces, spheres, projective spaces, etc. Familiarity with undergraduate algebra and topology MATH 541 or 551) is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MATH 752 – INTRODUCTORY TOPOLOGY II**

3 credits.

Continuation of MATH 751. Cohomology, Universal Coefficient Theorem, Kunneth Formula, cup and cap products, applications to manifolds, orientability, Poincare Duality. Differential forms, integration and Stokes Theorem, De Rham Theorem. Calculations, further duality theorems, Euler class, Lefschetz Fixed-Point Theorem.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 753 – ALGEBRAIC TOPOLOGY I**

3 credits.

Higher homotopy groups, elements of obstruction theory, fibrations, bundle theory, classifying spaces, applications to smooth manifolds, differential forms, vector bundles, characteristic classes, cobordism, applications and calculations. Basic graduate topology courses (e.g. MATH 751 and 752) are strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2013

**MATH 754 – ALGEBRAIC TOPOLOGY II**

3 credits.

Continuation of MATH 753. Topics include: spectral sequences and their applications, topology of Lie Groups, H-spaces, Hopf Algebras, homotopy classification of bundles, the Steenrod Algebra and its applications, introduction to generalized cohomology theories, spectra, elements of K-theory.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**MATH 758 – INTRODUCTION TO ERGODIC THEORY AND DYNAMICS**

3 credits.

An introduction to ergodic theory and dynamics covering fundamental theorems of ergodic theory, classical examples of one and two dimensional dynamics as well as applications to study of group actions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 761 – DIFFERENTIABLE MANIFOLDS**

3 credits.

Differentiable manifolds, vector bundles, implicit function theorem, submersions and immersions, vector fields and flows, foliations and Frobenius theorem, differential forms and exterior calculus, integration and Stokes' theorem, De Rham theory, Riemannian metrics. Familiarity with basic undergraduate analysis courses MATH 521 and 522 or MATH 621) is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MATH 763 – INTRODUCTION TO ALGEBRAIC GEOMETRY**

3 credits.

Algebraic preliminaries, including local rings; valuation theory, and power series rings; geometry of algebraic varieties with emphasis on curves and surfaces.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**MATH 764 – INTRODUCTION TO ALGEBRAIC GEOMETRY**

3 credits.

Continuation of MATH 763.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 765 – DIFFERENTIAL GEOMETRY**

3 credits.

Covers the metric properties of Riemannian manifolds. The following topics will be covered: Vector bundles and connections, Riemannian metrics, submanifolds and second fundamental form, first variation of arc length, geodesics, Hopf-Rinow theorem, second variation of arc length, Jacobi fields and index lemmas, Bonnet-Meyer theorem, Rauch comparison theorem, spaces of constant curvature, Hodge-de Rham theory. Familiarity with the topics in a differential manifolds course (e.g. MATH 761) is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MATH 770 – FOUNDATIONS OF MATHEMATICS**

3 credits.

First-order logic syntax and semantics, Completeness and Compactness Theorems, Lowenheim-Skolem Theorem, computable and computably enumerable sets, Incompleteness Theorem, axioms of Zermelo-Fraenkel set theory with choice, ordinal and cardinal arithmetic.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MATH 771 – SET THEORY**

3 credits.

Martin's Axiom, Suslin and Aronszajn trees, diamond principle, absoluteness and reflection, constructible universe, and one-step forcing constructions. Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**MATH 773 – COMPUTABILITY THEORY**

3 credits.

Turing degree and jump, strong reducibilities, arithmetic hierarchy, index sets, simple and (hyper)hypersimple sets, easy forcing arguments in computability theory, finite and infinite injury, Friedberg-Muchnik and Sacks Splitting Theorem, Sacks Jump and Sacks Density Theorems, computable ordinals. Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MATH 776 – MODEL THEORY**

3 credits.

Review of compactness and some consequences. Quantifier elimination with examples. The omitting types theorem. Categoricity. Baldwin-Lachlan theory. Strongly minimal and  $\omega$ -minimal theories. Saturated models.

Morley's theorem. Familiarity with the topics in a basic Foundations course such as MATH 770 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**MATH/CBE/E C E 777 – NONLINEAR DYNAMICS, BIFURCATIONS AND CHAOS**

3 credits.

Advanced interdisciplinary introduction to qualitative and geometric methods for dissipative nonlinear dynamical systems. Local bifurcations of ordinary differential equations and maps. Chaotic attractors, horseshoes and detection of chaos.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2016**MATH 790 – MASTERS THESIS**

1-3 credits.

Work on a Master's thesis under the supervision of a faculty member.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023

**MATH 801 – TOPICS IN APPLIED MATHEMATICS**

3 credits.

Selected topics in applied mathematics, applied analysis or numerical analysis and scientific computing.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH/STAT 803 – EXPERIMENTAL DESIGN I**

3 credits.

Summary of matrix algebra required, theory of estimable functions, incomplete blocks, balanced incomplete block designs, partially balanced incomplete block designs.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**MATH 807 – DYNAMICAL SYSTEMS**

3 credits.

Treats the qualitative behavior of continuous and discrete dynamical systems, including Hamiltonian systems of differential equations. Typical topics include periodic and almost periodic solutions, the fixed point theorem of Poincare and Birkhoff, invariant curves and KAM theory, celestial mechanics, and chaotic behavior.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH 821 – ADVANCED TOPICS IN REAL ANALYSIS**

3 credits.

Topics in partial differential equations and real analysis.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH 823 – ADVANCED TOPICS IN COMPLEX ANALYSIS**

3 credits.

Several complex variables. Basic several complex variables or more special topics.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH 825 – SELECTED TOPICS IN FUNCTIONAL ANALYSIS**

3 credits.

Topics will vary and may include spectral theory, nonlinear functional analysis or abstract harmonic analysis.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**MATH 826 – ADVANCED TOPICS IN FUNCTIONAL ANALYSIS AND DIFFERENTIAL EQUATIONS**

3 credits.

Topics in functional analysis and differential equations.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**MATH 827 – FOURIER ANALYSIS**

3 credits.

Introduction to Fourier analysis in Euclidean spaces and related topics that may include singular and oscillatory integrals and trigonometric series.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH 828 – ADVANCED TOPICS IN HARMONIC ANALYSIS**

3 credits.

Continuation of MATH 827. Advanced topics in harmonic analysis.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH/STAT 833 – TOPICS IN THE THEORY OF PROBABILITY**

3 credits.

Advanced topics in probability and stochastic processes.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH/E C E 842 – TOPICS IN APPLIED ALGEBRA**

3 credits.

Applied topics with emphasis on algebraic constructions and structures. Examples include: algebraic coding theory; codes (algebraic-geometric, convolutional, low-density-parity-check, space-time); curve and lattice based cryptography; watermarking; computer vision (face recognition, multiview geometry).

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH 843 – REPRESENTATION THEORY**

3 credits.

Introduction to the representation theory of Lie groups and their combinatorics. Universal enveloping algebras, highest weight modules, induction, restriction, weights, characters, multiplicity formulas, tensor products, Shapovalov forms, filtrations, Kazhdan-Zetlin patterns, Littelmann paths.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**MATH 844 – ARITHMETIC GEOMETRY**

3 credits.

An introduction to arithmetic geometry with emphasis on arithmetic of elliptic curves.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MATH 845 – CLASS FIELD THEORY**

3 credits.

Introduction to local and global class field theory. Theory of local fields; local and global class field theory; complex multiplication, adeles, ideles, idele class characters, Tchebotarev's Density Theorem, CM elliptic curves, construction of class fields of imaginary quadratic fields.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**MATH 846 – TOPICS IN COMBINATORICS**

3 credits.

Topics in algebraic combinatorics such as (but not limited to) association schemes, hypergeometric series, classical orthogonal polynomials, codes, lattices, invariant theory, alternating sign matrices and domino tilings, statistical mechanical models, 6j-symbols, buildings and diagram geometries, matroids.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MATH 847 – TOPICS IN ALGEBRA**

3 credits.

Topics may include: Lie groups, algebraic groups, Chevalley groups, simple groups and associated geometries, group cohomology, group rings, Hopf algebras, enveloping algebras, quantum groups, infinite-dimensional Lie algebras, Hecke algebras, automorphic forms, Galois representations, zeta and L-functions, abelian varieties.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**MATH 848 – ADVANCED TOPICS IN NUMBER THEORY**

3 credits.

This is an advanced graduate topic course in number theory. Topics will vary. Target audience: Advanced graduate students in number theory, representation theory, and algebraic geometry.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**MATH 849 – AUTOMORPHIC FORMS**

3 credits.

Classical and/or modern theory of automorphic forms. Representation theory of  $GL(2)$ .

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MATH 851 – TOPICS IN GEOMETRIC TOPOLOGY**

3 credits.

Advanced Topics in Geometric Topology.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**MATH 853 – TOPICS IN ALGEBRAIC TOPOLOGY**

3 credits.

Topics in Algebraic Topology.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MATH 856 – TOPICS IN DIFFERENTIAL TOPOLOGY**

3 credits.

The theory of differential manifolds such as differential forms and de Rham theorem, cobordism groups, Lie groups, homogeneous spaces, fiber bundles, characteristic classes.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**MATH 863 – ADVANCED TOPICS IN ALGEBRAIC GEOMETRY**

3 credits.

Geometry of several complex variables; algebraic groups, abelian varieties; topological aspects of algebraic geometry, including sheaf theory and homology theory; advanced theory of local rings; intersection theory of algebraic varieties.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 865 – ADVANCED TOPICS IN GEOMETRY**

3 credits.

Selected from advanced projective geometry, non-Euclidean geometry, Riemannian geometry, distance geometry and the geometry of convex surfaces, geometry of numbers.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MATH 867 – ANALYTIC NUMBER THEORY**

3 credits.

Prime number theory, prime number theory for arithmetic progressions, additive number theory, density theorems.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**MATH 873 – ADVANCED TOPICS IN FOUNDATIONS**

3 credits.

Advanced topics from all areas of mathematical logic.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MATH/E C E/STAT 888 – TOPICS IN MATHEMATICAL DATA SCIENCE**

1-3 credits.

Advanced topics in the mathematical foundations of data science

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 900 – GRADUATE TEACHING SEMINAR**

1 credit.

Focuses on theory and practical skills relevant to teaching mathematics at the graduate or post-secondary level.

**Requisites:** Declared in Mathematics PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MATH 921 – SEMINAR IN ANALYSIS**

1-3 credits.

Selected topics in Analysis.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MATH 941 – SEMINAR-ALGEBRA**

1-3 credits.

Selected topics in Algebra.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 951 – SEMINAR IN TOPOLOGY**

1-3 credits.

Selected topics in Topology.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 967 – SEMINAR IN NUMBER THEORY**

1-3 credits.

Selected topics in Number Theory.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 975 – SEMINAR-THE FOUNDATIONS OF MATHEMATICS**

1-3 credits.

Selected topics in Mathematical Logic.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MATH 990 – READING AND RESEARCH**

1-3 credits.

Reading and research in all areas of Mathematics.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

# MECHANICAL ENGINEERING (M E)

**M E 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career in industry.

**Requisites:** Sophomore standing**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**M E 151 – INTRODUCTION TO MECHANICAL ENGINEERING**

2 credits.

Introduction to the field of Mechanical Engineering through problem-solving in the context of small group projects. Fabricate, build, and test prototypes. Introduction to computer software of particular relevance to Mechanical Engineers.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2017**M E 160 – ARCHITECTURAL GRAPHICS**

3 credits.

The skill of communicating through the graphic media of freehand and instrumental drawing. Architectural presentation, isometric, perspective and shades and shadows.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2018**M E 170 – CIVIL ENGINEERING GRAPHICS**

2 credits.

To develop an awareness of and appreciation for work that is characteristic of civil engineering. Graphical communication including lettering, drawing equipment and techniques; geometric construction, orthographic projections, pictorial drawing, and technical sketching, isometric, oblique and perspective projections, descriptive geometry, computer-aided design drawing, applications to civil engineering problems.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023

**M E 201 – INTRODUCTION TO MECHANICAL ENGINEERING**

3 credits.

Provides an introduction to the field of Mechanical Engineering in the context of a major, semester-long project that is carried out in small groups as well as several, smaller hands-on projects. Obtain a shop pass, design build and test small prototypes using the shop as well as 3-D printing, take measurements using various instruments, and use a microcontroller to control a system. Introduction to software that is particularly useful to Mechanical Engineers including SolidWorks and EES. Learn how to design experiments, obtain data, use data to develop simple models of systems, exercise models for the purposes of design, and present their results professionally. It will provide a context for the math, physics and chemistry classes that are taken during the first year of the Mechanical Engineering curriculum and also provide a preview of future ME courses and should also give you a glimpse into the breadth of opportunities afforded by a mechanical engineering degree.

**Requisites:** Declared in Biomedical, Biological Systems, Chemical, Civil, Computer, Electrical, Environmental, Geological, Industrial, Mechanical, or Nuclear Engineering, Materials Science and Engineering, Engineering Physics, or Engineering Mechanics

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 231 – GEOMETRIC MODELING FOR DESIGN AND MANUFACTURING**

3 credits.

Introduction to basic methods and fundamental concepts in geometric description and modeling of mechanical form, components, and assemblies. Topics include elements of descriptive geometry, engineering drawing standards, introduction to computer modeling, and geometric dimensioning and tolerancing (GDT). Lectures are reinforced by the laboratory experience where students operate modern commercial computer-aided design systems to model and to learn the basics of engineering communication, specification, and annotation.

**Requisites:** Declared in Biomedical, Biological Systems, Chemical, Civil, Computer, Electrical, Environmental, Geological, Industrial, Mechanical or Nuclear Engineering, Mat Sci and Engin, Engin Physics, Engineering Mechanics or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 240 – DYNAMICS**

3 credits.

Rectilinear and curvilinear motion of a particle; force, mass, acceleration; work, potential, and kinetic energy; impulse and momentum; kinematics of rigid bodies; moving coordinate systems with relative motion; general planar rigid body kinematics and kinetics. Applications to linkages, cams and geared systems.

**Requisites:** E M A 201 and (MATH 222 or 276), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 273 – ENGINEERING PROBLEM SOLVING WITH EES**

1 credit.

This course will serve the dual purpose of providing students with a high level of proficiency in the Engineering Equation Solver software as well as giving students the opportunity to solve high-level engineering problems using this tool. Students leaving the course will have a very solid understanding of equation solving software including advanced features that would not be covered in any other class on campus. Students will also get another opportunity to apply sophisticated computing tools to engineering applications.

**Requisites:** MATH 222 or 276, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 291 – UNDERGRADUATE MECHANICAL ENGINEERING PROJECTS**

1-3 credits.

Individual lab projects under staff supervision.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 299 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 306 – MECHANICS OF MATERIALS**

3 credits.

Stress and strain, torsion, bending of beams, shearing stresses in beams, compound stresses, principal stresses, deflections of beams, statically indeterminate members, columns.

**Requisites:** E M A 201 and (MATH 222 or 276), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/E M A 307 – MECHANICS OF MATERIALS LAB**

1 credit.

Data processing, tension/compression tests, creep stress concentrations, fatigue, fracture, composite materials, combined stress, beam flexure, dynamic loads, buckling.

**Requisites:** (M E 306, E M A 303 or concurrent enrollment) or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**M E 310 – MANUFACTURING: POLYMER PROCESSING AND ENGINEERING**

3 credits.

Introduction to all important aspects of polymer processing and engineering including polymeric materials, material properties, design and manufacturing considerations, processing methods, part performance, post-consumer recycling and upcycling, societal responsibilities and ethics, and various techniques for modeling in materials processing like dimensional analysis, design of experiments, analytical solutions, and computer simulation.

**Requisites:** (M E 306 or E M A 303) and M E 231**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 311 – MANUFACTURING: METALS AND AUTOMATION**

3 credits.

An introduction to processes for manufacturing metal parts, designing parts to make them easier to manufacture with these methods, and approaches for increasing productivity. Manufacturing automation, control, and metrology for increased safety, productivity, and part quality. Engineering economics for determining the cost of manufacturing a part.

**Requisites:** (M S & E 350, 351, or 352 or declared in Biological Systems Engineering: Machinery Systems BS), M E 231, and (M E 306 or E M A 303)**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 313 – MANUFACTURING PROCESSES**

3 credits.

A quantitative and qualitative study of manufacturing processes including machining, extrusion, sheet metal forming, welding, and casting for metals; and additive manufacturing, extrusion, injection molding, thermoforming and blow molding for plastics. Emphasis on process selection for optimum design. Laboratory experiments and demonstrations. Quality, strength, and economic evaluations.

**Requisites:** (M S & E 350, 351, or 352) or (declared in Biological Systems Engineering: Machinery Systems, BS and M E 306 or E M A 303)**Repeatable for Credit:** No**Last Taught:** Spring 2021**M E 314 – MANUFACTURING FUNDAMENTALS**

3 credits.

An introduction to techniques for modeling in materials processing and improving decision making in increasing the productivity of design and manufacturing processes. Quality improvement and engineering simulation tools are presented as well as the methods of engineering economy and the role of manufacturing automation and systems, through lectures and laboratories.

**Requisites:** M E 313 and (M E 340 or concurrent enrollment)**Repeatable for Credit:** No**Last Taught:** Fall 2022**M E 331 – COMPUTER-AIDED ENGINEERING**

3 credits.

Introduction to the fundamentals of Computer Aided Engineering. Topics include mathematical and programmable methods for modeling and design of mechanical shapes and assemblies; shape processing for manufacturing, including NC machining and 3D printing; and computer-aided analysis of structural, thermal and other physical properties.

**Requisites:** M E 231, (MATH 320, 340, 341, or 375), (M E 306 or E M A 303 or concurrent enrollment), (M E 240 or EMA 202), and (COMP SCI 200, 220, 300, 301, 310, or placement into COMP SCI 300), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 340 – DYNAMIC SYSTEMS**

3 credits.

Mathematical modeling and analysis of dynamic systems with mechanical, thermal, and fluid elements. Topics: time domain solutions, analog computer simulation, linearization techniques, block diagram representation, numerical methods and frequency domain solutions. Students are assumed to have basic competence in particle and planar rigid body dynamics, matrix and vector algebra, and linear differential equations.

**Requisites:** (M E 240 or E M A 202) and (MATH 319, 320, or 375), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 342 – DESIGN OF MACHINE ELEMENTS**

3 credits.

Analysis and design of machine elements and machines; loads, stresses, deflections, material selection, fatigue failure, finite elements; mechanical power transmission components including gearing, bearings, shafting, and frictional devices.

**Requisites:** (M E 306 or E M A 303) and (M E 331, B M E 201, or concurrent enrollment or declared in Biological Systems Engineering), or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 346 – INTRODUCTION TO FEEDBACK CONTROL FOR MECHANICAL ENGINEERS**

3 credits.

Overview of linear feedback control analysis and design techniques for mechanical systems. Modeling of linear dynamic mechanical systems (review), derivation of their defining differential equations, and analysis of their response using both transient and frequency response techniques; Analysis and design of feedback control of mechanical systems using classical control transform techniques such as root locus and frequency response; Analysis of system robustness through evaluation of phase and gain margins and the Nyquist stability criterion. Design domains, including mechanical, thermal, and fluid feedback control systems. Effects of non-ideal system characteristics commonly encountered in mechanical systems, such as compliance, delay, and actuator and sensor saturation.

**Requisites:** M E 340, E M A 545, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022

**M E 349 – ENGINEERING DESIGN PROJECTS**

3 credits.

Applied engineering design projects. Emphasis on design of practical mechanical engineering systems, devices and/or components. Two 2-hr labs and one lecture per week. Lecture focuses on the design process, creativity, patents, and other applications to practical problems.

**Requisites:** Declared in Mechanical Engineering with senior standing and M E 331

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**M E 351 – INTERDISCIPLINARY EXPERIENTIAL DESIGN PROJECTS I**

3 credits.

First of a two-course sequence (M E 351 and 352) in which students design and fabricate systems and devices, typically having an interdisciplinary aspect. In the first course, emphasis will be on project planning, team dynamics, problem identification, and conceptual design and evaluation.

**Requisites:** Declared in Mechanical Engineering with senior standing and M E 331

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 352 – INTERDISCIPLINARY EXPERIENTIAL DESIGN PROJECTS II**

3 credits.

Design and fabricate systems and devices, typically having an interdisciplinary aspect. Emphasis will be on detailed design, fabrication, testing, and modification of concepts developed in the previous course (M E 351).

**Requisites:** Senior standing and M E 351

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 361 – THERMODYNAMICS**

3 credits.

First and second laws of thermodynamics; thermodynamic properties of gases, vapors, and gas-vapor mixtures; energy-systems analysis including power cycles, refrigeration cycles and air-conditioning processes. Introduction to thermodynamics of reacting mixtures.

**Requisites:** (CHEM 103 or 109) and E M A 201, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 363 – FLUID DYNAMICS**

3 credits.

Laws of mechanics and thermodynamics applied to fluids at rest and in motion; potential flow; dimensional analysis; viscous flow; pipe flow; boundary-layer theory; compressible flow.

**Requisites:** M E 361 and (MATH 319, 320 or 375), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 364 – ELEMENTARY HEAT TRANSFER**

3 credits.

Fundamental concepts of conduction, convection, radiation. Heat-exchanger principles.

**Requisites:** M E 361 and (M E 363 or concurrent enrollment), or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 368 – ENGINEERING MEASUREMENTS AND INSTRUMENTATION**

4 credits.

Theory of modern instrumentation, the design and execution of experiments and the analysis of experimental data. Laboratory provides direct experience with concepts in the context of experimental design for hypothesis testing, for product evaluation and for control system design.

**Requisites:** (M E 306 or E M A 303), M E 361, 340, and (E C E 376 or 230)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 370 – ENERGY SYSTEMS LABORATORY**

3 credits.

Experimental evaluation and analysis of performance of various energy conversion systems such as turbines, compressors, refrigerators, fans, and internal combustion engines.

**Requisites:** M E 363 and (M E 364 or concurrent enrollment) and (M E 368 or concurrent enrollment)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 376 – INTRODUCTION TO MECHATRONICS**

4 credits.

Fundamentals of DC and AC circuit analysis and design, stressing tools needed to understand circuits typically used in instrumentation and control of physical systems (sensors/actuators); an introduction to the design of active and passive linear circuits for buffering and filtering signals; an introduction to digital circuits, Boolean logic, programming, especially as needed for computer interface operations in mechanical engineering applications (example: embedded microcontrollers). Laboratory exercises.

**Requisites:** (M E 340 or concurrent enrollment), (MATH 320, 319, or 376), and (PHYSICS 202, 208, or 248), or graduate/professional standing

**Repeatable for Credit:** No

**M E/B M E 414 – ORTHOPAEDIC BIOMECHANICS - DESIGN OF ORTHOPAEDIC IMPLANTS**

3 credits.

Apply the design process for orthopaedic implants (total joint replacements). Topics include: library skills; joint anatomy; tissue properties; surgical approach; joint loading; implants materials; preclinical testing and analysis.

**Requisites:** Senior standing and (M E 306 or E M A 303), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/B M E 415 – BIOMECHANICS OF HUMAN MOVEMENT**

3 credits.

An overview of experimental and modeling techniques used to study human movement. Specific topics will include locomotion, motion capture systems, force plates, muscle mechanics, musculoskeletal modeling, three dimensional kinematics, inverse dynamics, forward dynamic simulation and imaging based biomechanics. Homework and laboratory activities emphasize applications of movement biomechanics in orthopedics and rehabilitation.

**Requisites:** B M E 315 and M E 340, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 417 – TRANSPORT PHENOMENA IN POLYMER PROCESSING**

3 credits.

Description of the physical, thermal, mechanical, and rheological properties of polymeric materials relevant to their processing behavior. Review of the basic transport phenomena equations: mass, momentum, and energy. Analysis of various processing operations for the manufacture of polymeric articles, with particular emphasis on: extrusion, injection molding, blow molding, thermoforming, compression molding and additive manufacturing. Discussion of plastics recycling and environmental issues.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 418 – ENGINEERING DESIGN WITH POLYMERS**

3 credits.

Implications for plastics part design of polymer classification, structure, melt rheology, mixing, polymer blends, anisotropy, solidification, mechanical behavior, failure. Plastics design for electrical, optical, acoustic and barrier properties.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 419 – FUNDAMENTALS OF INJECTION MOLDING**

3 credits.

All major aspects of injection molding with emphases on design, processing, process physics, computer-aided engineering (CAE), troubleshooting, and advanced molding processes. Field trip, video presentation, case studies, term project with oral presentation, and hands-on sessions using commercial CAE simulation software.

**Requisites:** Senior standing, member of Engineering Guest Students, or declared in Capstone Certificate in Polymer Processing and Manufacturing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 420 – INTRODUCTION TO POLYMER COMPOSITES PROCESSING**

3 credits.

A brief description of the physical, thermal, rheological and mechanical properties of composite materials. Apply fundamental transport phenomena concepts to solve problems dealing with flow through porous media, fiber orientation, curing reactions, shrinkage and warpage and mechanics of composites. Introduction of various processing operations for the manufacture of composites products, with particular emphasis on resin transfer molding, vacuum assisted resin infusion, injection and compression molding, filament winding, braiding and pultrusion. The course includes laboratory experiments, CAE applied to composites product design, and a final group project producing a composites product.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**M E/STAT 424 – STATISTICAL EXPERIMENTAL DESIGN**

3 credits.

Introduction to statistical design and analysis of experiments. Topics include: principles of randomization, blocking and replication, randomized blocking designs, Latin square designs, full factorial and fractional factorial designs and response surface methodology. Substantial focus will be devoted to engineering applications.

**Requisites:** STAT 240, 301, 302, 312, 324, 371, or STAT/MATH/STAT 310

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 429 – METAL CUTTING**

3 credits.

Theory and applications of metal cutting; basic principles; significant features of current research. Chip formation mechanics, three-dimensional machining operations, tool life and machinability, economics of metal removal, and precision engineering.

**Requisites:** Senior standing and declared in Biomed, Biological Sys, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical or Nuclear Egr, Materials Sci Egr, Egr Physics, Egr Mechanics, grad/professional standing or member of Egr Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M E 437 – ADVANCED MATERIALS SELECTION**

3 credits.

A structured approach is developed to address the complex problem of materials selection in design where multiple constraints and conflicting objectives need to be considered. Topics include: introductory fracture mechanics; corrosion and corrosion mitigation; effects of manufacturing processes and process selection; property development in metals, ceramics, polymers and composites; and material analysis techniques.

**Requisites:** M E 313 or M S & E 332, or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/E C E 439 – INTRODUCTION TO ROBOTICS**

3 credits.

Hands-on introduction to key concepts and tools underpinning robotic systems in use and development today. Intended to give students the tools to understand robotic systems, to explore robotics for their own purposes, and to pursue advanced study in the field. Students are expected to have familiarity with a high level programming language such as Python (recommended), MATLAB, Java or Julia.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 440 – INTERMEDIATE VIBRATIONS**

3 credits.

Harmonic motion; natural frequencies and vibration of damped and undamped single and multi-degree of freedom systems; modal analysis; influence coefficients; lumped-mass modeling; dynamic load factors; Rayleigh's method; flow-induced vibrations; shaft whirl; balancing; vibration absorbers and tuned mass dampers; finite element modeling.

**Requisites:** (M E 306 or E M A 303) and (M E 340 or M E/E M A/ M E 540), or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 444 – DESIGN PROBLEMS IN ELASTICITY**

3 credits.

Analysis of elastic systems by strain-energy techniques. Determination of stresses and deflections in statically indeterminate structures encountered in design. Resilience in springs.

**Requisites:** M E 306, E M A 303, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**M E 445 – MECHATRONICS IN CONTROL & PRODUCT REALIZATION**

3 credits.

Fundamentals of electromechanical control systems with a focus on subsystem design and their impacts at the system level. Integration of microcontrollers into products for control and/or instrumentation. Creation of intelligent interfaces between motors and sensors. C programming. Control computer system architecture Software and hardware principles for computer control.

**Requisites:** E C E 376, 230, or (B M E 201 and B M E 310), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 446 – AUTOMATIC CONTROLS**

3 credits.

Sequencing control. Theory of linear feedback control systems with illustrative examples taken from applications encountered by mechanical engineers; differential equations for defining dynamic system response, Laplace transforms, and transient and frequency response concepts.

**Requisites:** M E 340, graduate/professional standing, member of Engineering Guest Students, or declared in Capstone Certificate in Power Conversion and Control

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 447 – COMPUTER CONTROL OF MACHINES AND PROCESSES**

3 credits.

Discrete control theory reduced to engineering practice through a comprehensive study of discrete system modeling, system identification and digital controller design. Selected industrial processes and machines utilized as subjects on which computer control is to be implemented. Focus: computer control economics and planning as well as the control theory and programming.

**Requisites:** M E 340, 346, or 446, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 448 – MECHANICAL SYSTEMS ANALYSIS**

3 credits.

Integrated treatment of mathematical modeling and analysis of mechanical systems. Modeling of linear and nonlinear systems and their performance under transient, periodic and random loads.

**Requisites:** Senior standing and declared in Biomed, Biological Sys, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical or Nuclear Egr, Materials Sci Egr, Egr Physics, Egr Mechanics, Applied Math, Egr and Physics, grad/prof or EGRG

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**M E 449 – REDESIGN AND PROTOTYPE FABRICATION**

3 credits.

Principles of design, manufacturing, and prototype evaluation. A semester long project provides the opportunity to redesign of a thermo-mechanical device (Stirling Engine) using knowledge/skills acquired both through this course and previous course offerings in thermal sciences, mechanics and dynamics, manufacturing, and design. Instruction and hands-on experience using the manufacturing tools/processes available in the CoE. Design, dimensioning and tolerancing, manufacturing, and quantitative analysis are all covered in a structured semester project.

**Requisites:** Senior standing and (M E 306 or E M A 303), (M E 311 or 313 or concurrent enrollment), and M E 331, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 451 – KINEMATICS AND DYNAMICS OF MACHINE SYSTEMS**

3 credits.

Graphical, analytical, and computer methods for the kinematic and dynamic analysis of mechanical linkages, mechanisms, and geared and cam systems.

**Requisites:** M E 240, E M A 202, PHYSICS 201, 207, 247, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 459 – COMPUTING CONCEPTS FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of computing concepts that support modeling and simulation in engineering applications. Learn the basics of computer architecture, software development and the interplay between software and hardware components.

**Requisites:** COMP SCI 200, 220, 300, 301, 302, 320, or placement into COMP SCI 300, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 460 – APPLIED THERMAL / STRUCTURAL FINITE ELEMENT ANALYSIS**

3 credits.

The course is designed for undergraduate students with no finite element (FE) analysis experience or knowledge. By the end of the semester the student will be able to simulate 1D, 2D and 3D structural and thermal systems, including both the static and transient response, using a common, commercially available FE software package. Analyses will be performed using both GUI and APDL. The emphasis of the course is on becoming proficient with the software and capable of operating an FE package at a high level, including benchmarking and verifying the FE model using simple analytical checks. An additional emphasis of the course is on understanding the impact of the temperature distribution in an object on the stress field through thermal expansion.

**Requisites:** M E 306 or E M A 303, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 461 – THERMAL SYSTEMS MODELING**

3 credits.

Analysis and design of engineering systems involving applications of thermodynamics, economics, heat transfer, and fluid flow.

**Requisites:** M E 364 or concurrent enrollment, or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/M S & E 462 – WELDING METALLURGY**

3 credits.

Metallurgical principles applied to welding; mechanisms of strengthening, phase equilibria, and microstructure of the weld zone. Modern processes including laser and electron beam welding.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E 466 – AIR POLLUTION EFFECTS, MEASUREMENTS AND CONTROL**

3 credits.

Overview of human health and environmental effects, and legislation regarding air pollution. Atmospheric transport and transformation of air pollutants. Emissions of air pollutants from power plants, transportation and industrial sources. Control technology for particulate and gaseous emissions. Monitoring and measurement of air pollutants. Application to boilers, engines, industrial processes and solid waste-to-energy technology.

**Requisites:** Senior standing and declared in Biomed, Biological Sys, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical or Nuclear Egr, Materials Sci Egr, Egr Physics, Egr Mechanics, grad/professional standing or member of Egr Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 468 – COMPUTER MODELING AND SIMULATION OF AUTONOMOUS VEHICLES AND ROBOTS**

3 credits.

Introduction to the Robot Operating System (ROS). Concepts of vehicle dynamics modeling and simulation, with focus on tire, suspension, steering system, and powertrain modeling. Simulation of sensors (camera, lidar, radar, GPS, IMU). Terramechanics modeling for mobility on deformable terrains. Introduction to the autonomy stack (sensing, perception, planning, and control). Elements of artificial intelligence in autonomy. Elements of verification and validation.

**Requisites:** M E 459 and (COMP SCI 200, 220, 300, 301, 302, 320, or placement into COMP SCI 300), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E 469 – INTERNAL COMBUSTION ENGINES**

3 credits.

Fundamental principles of engine operation and application including cycle analysis, gas analysis, effect of operating conditions and engine design on air pollution.

**Requisites:** M E 361, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 471 – GAS TURBINE AND JET PROPULSION**

3 credits.

Principles of thermodynamics and fluid dynamics utilized in the analysis and design of gas-turbine cycles, components and systems for stationary, automotive and aircraft applications.

**Requisites:** M E 364, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 472 – ENERGY, SUSTAINABILITY, AND TECHNOLOGY**

3 credits.

Thermodynamic analysis of energy conversion systems with emphasis on efficiency and greenhouse gas emissions; basic economic analysis of energy systems; radiative energy exchange with participating atmosphere; global energy balance; electricity production and transportation sustainability.

**Requisites:** M E 361 and (COMP SCI 200, 220, 300, 301, 310, or placement into COMP SCI 300), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M E/BSE 474 – FLUID POWER**

3 credits.

Engineering principles of design and analysis of fluid power systems and fluid power components. Topics include hydraulic fluid properties, fluid flow and, positive displacement pumps, valves for pressure, flow, and directional control, linear and rotary actuators, accumulators, pressure compensation, load sensing, energy management and system efficiency.

**Requisites:** M E 363, CIV ENGR 310, CBE 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M E/BSE 475 – ENGINEERING PRINCIPLES OF AGRICULTURAL MACHINERY**

3 credits.

Engineering design principles of machines for the production, processing and handling of crops for food, fuel, bio-mass and fiber. Environmental and biological factors that influence machine design and operation. Economic and capacity analysis of machines and systems.

**Requisites:** Declared in Biological Systems Engineering or Mechanical Engineering and (M E 240, E M A 202, PHYSICS 201, 207, or 247), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/BSE 476 – ENGINEERING PRINCIPLES OF OFF-ROAD VEHICLES**

3 credits.

Engineering design principles of heavy-duty vehicles intended for off-road use: fuels, engine cycles, engine principles and construction, clutches, mechanical and hydrostatic transmissions, final drives, traction systems, traction modeling, dynamic behavior, suspension systems and braking.

**Requisites:** (M E 361 or concurrent enrollment), (M E 240, E M A 202, PHYSICS 201, 207, or 247), and declared in Biological Systems Engineering or Mechanical Engineering or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate honors research projects supervised by faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 491 – MECHANICAL ENGINEERING PROJECTS I**

1-3 credits.

Individual lab projects under staff supervision.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 492 – MECHANICAL ENGINEERING PROJECTS II**

1-3 credits.

Continuation of M E 491.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E/B M E 505 – BIOFLUIDICS**

3 credits.

Introduction to the physics of biological fluid flow with an emphasis on the cardiovascular system including blood rheology, pulsatile flow, wave travel, and topics relevant to blood flow measurement and biomedical device design.

**Requisites:** B M E 330, CBE 320, M E 363, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**M E/CIV ENGR/E M A 508 – COMPOSITE MATERIALS**

3 credits.

Physical properties and mechanical behavior of polymer, metal, ceramic, cementitious, cellulosic and biological composite systems; micro- and macro-mechanics; lamination and strength analyses; static and transient loading; fabrication; recycling; design; analytical-experimental correlation; applications.

**Requisites:** (E M A 303 or M E 306), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/I SY E 510 – FACILITIES PLANNING**

3 credits.

Introduction to plant location theory and analysis of models of plant location; models for determining plant size and time phasing; line balancing models; techniques for investigating conveyor and other material handling problems; and models of plant layout.

**Requisites:** I SY E 315, (I SY E 323 or I SY E/COMP SCI/ E C E/COMP SCI/I SY E 524) and I SY E/PSYCH 349, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/I SY E 512 – INSPECTION, QUALITY CONTROL AND RELIABILITY**

3 credits.

Inspection data for quality control; sampling plans for acceptance inspection; charts for process control. Introduction to reliability models and acceptance testing.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 514 – POLYMER ADDITIVE MANUFACTURING**

3 credits.

A quantitative and qualitative study of additive manufacturing processes. Emphasis on proper additive manufacturing technique selection for optimized final product design and properties, as well as presentation of emerging additive manufacturing techniques.

**Requisites:** Senior standing and (M E 310 or 313), graduate/professional standing, member of Engineering Guest Students, or declared in Capstone Certificate in Polymer Processing and Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E/B M E 516 – FINITE ELEMENTS FOR BIOLOGICAL AND OTHER SOFT MATERIALS**

3 credits.

Finite element modeling of soft materials, with an emphasis on biological tissues. Basics of the finite element method, verification and validation methods, and selection of constitutive models. Emphasis on finite element modeling for materials that are generally nonlinear, and that generally undergo large deformation.

**Requisites:** (M E 306 or E M A 303), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**M E/N E 520 – TWO-PHASE FLOW AND HEAT TRANSFER**

3 credits.

Two-phase flow and heat transfer in engineering systems. Pool boiling and flow boiling. Phenomenological modeling.

**Requisites:** M E 361 and (M E 364 or CBE/B M E 320), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E/CBE 525 – MACROMOLECULAR HYDRODYNAMICS**

3 credits.

Observed phenomena in polymeric flow systems. Techniques of viscometry and viscoelastic measurements for polymeric fluids. Rheological models. Analytical solutions to flow problems: non-Newtonian viscosity, linear viscoelasticity, normal stresses, recoil, stress relaxation, etc. Dimensional analysis. Unit operations of the polymer industry: extrusion, blow molding, injection molding, mixing.

**Requisites:** M E 363, CBE/B M E 320, member of Engineering Guest Students, or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**M E 529 – SMART MANUFACTURING**

3 credits.

Introduction to "Smart Manufacturing," including the basic knowledge needed to understand how a company can connect its operational technology systems (e.g., machine tools) to its information technology systems, and how this can improve operational efficiency. Terminology, sensors and data, data communication, cyber-security, closed-loop (feedback) control theory, control theoretic applications, and automation for manufacturing. Provides the basis for making informed decisions about how manufacturing processes and systems can be made more adaptive (flexible) by automating, collecting the right data, and applying closed-loop (feedback) control: i.e., cyber-physical systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 531 – DIGITAL DESIGN AND MANUFACTURING**

3 credits.

Broad overview of concepts, methods and tools for manipulating digital geometric models for engineering design and manufacturing. Topics include freeform curves, surfaces, and solid modeling. Topics also include slicing, support generation and path planning for additive and subtractive manufacturing. Provides both cutting-edge knowledge and hands-on project experiences in digital design and manufacturing. It will involve the use of CAD software for creative shape design. It will also involve 3D printers and 3D scanners in the ME Instructional Lab and Maker Space.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**M E/COMP SCI/E C E 532 – MATRIX METHODS IN MACHINE LEARNING**

3 credits.

Linear algebraic foundations of machine learning featuring real-world applications of matrix methods from classification and clustering to denoising and data analysis. Mathematical topics include: linear equations, regression, regularization, the singular value decomposition, and iterative algorithms. Machine learning topics include: the lasso, support vector machines, kernel methods, clustering, dictionary learning, neural networks, and deep learning. Previous exposure to numerical computing (e.g. Matlab, Python, Julia, R) required.

**Requisites:** (MATH 234, 320, 340, 341, or 375) and (E C E 203, COMP SCI 200, 220, 300, 301, 302, 310, 320, or placement into COMP SCI 300), graduate/professional standing, or declared in Capstone Certificate in Computer Sciences for Professionals

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 535 – COMPUTER-AIDED GEOMETRIC DESIGN**

3 credits.

Designed to acquaint the student with computer-aided design technology used for geometric design of engineered products. Currently used methods of creating three-dimensional computer-aided design (CAD) models will be discussed. Paradigms of three-dimensional wire-frame modeling, surface modeling and solids modeling as applied in product design. Techniques for freeform curve and surface modeling will be emphasized.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/COMP SCI/E C E 539 – INTRODUCTION TO ARTIFICIAL NEURAL NETWORKS**

3 credits.

Theory and applications of artificial neural networks: multi-layer perceptron, self-organization map, deep neural network, convolutional neural network, recurrent network, support vector machines, genetic algorithm, and evolution computing. Applications to control, pattern recognition, prediction, and object detection and tracking.

**Requisites:** COMP SCI 200, 220, 300, 301, 302, 310, placement into COMP SCI 300, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/E M A 540 – EXPERIMENTAL VIBRATION AND DYNAMIC SYSTEM ANALYSIS**

3 credits.

Application of digital data acquisition to the investigation of mechanical components, structures and systems using time histories, transforms and response functions to characterize free, forced and transient inputs. Introduction to sensors, instrumentation and methods appropriate for dynamic system response.

**Requisites:** (M E 440, E M A 545, or concurrent enrollment) or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 548 – INTRODUCTION TO DESIGN OPTIMIZATION**

3 credits.

Introduces basic concepts and techniques used in the optimization of engineering design components and systems. Pose and solve typical optimization problems such as truss and finite-element-based optimization.

**Requisites:** M E 306 or E M A 303, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 549 – PRODUCT DESIGN**

3 credits.

A project oriented, interdisciplinary course with an emphasis on designing competitive, quality products. The product development process is covered from problem identification through detail design and evaluation. Included among the topics covered are: idea generation and evaluation, visualization, and quality.

**Requisites:** Senior standing and declared in Biomed, Biological Sys, Chemical, Civil, Computer, Electrical, Geological, Industrial, Mechanical or Nuclear Egr, Materials Sci Egr, Egr Physics, Egr Mechanics, grad/professional standing or member of Egr Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/COMP SCI/I SY E 558 – INTRODUCTION TO COMPUTATIONAL GEOMETRY**

3 credits.

Introduction to fundamental geometric computations and algorithms, and their use for solving engineering and scientific problems. Computer representations of simple geometric objects and paradigms for algorithm design. Applications from areas of engineering analysis, design and manufacturing, biology, statistics, and other sciences.

**Requisites:** (COMP SCI 367 or 400) and MATH 234 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**M E 561 – INTERMEDIATE THERMODYNAMICS**

3 credits.

Fundamentals; phase and chemical equilibria; availability; thermodynamic relationships.

**Requisites:** M E 361 or CBE 311, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 563 – INTERMEDIATE FLUID DYNAMICS**

3 credits.

Incompressible and compressible, laminar and turbulent flow of fluids. Classical and finite-difference analysis using differential and integral formulation of the continuity, momentum and energy equations. Application to ducts, plates, spheres, blades, pumps, turbines, lubrication, shockwaves, nozzles, diffusers and other mechanical engineering equipment.

**Requisites:** M E 363, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 564 – HEAT TRANSFER**

3 credits.

Applications of conduction, convection, and thermal-radiation principles to combined-mode problems; analytical and numerical techniques; heat-exchanger design; thermal stresses.

**Requisites:** M E 364, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/N E 565 – POWER PLANT TECHNOLOGY**

3 credits.

Design and performance of power plants for the generation of electric power; fossil and nuclear fuels, cycle analysis, component design and performance, plant operation, control, economics and environmental impact. Advanced concepts.

**Requisites:** M E 361, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/E P 566 – CRYOGENICS**

3 credits.

Applications of cryogenics, material properties at low temperatures, refrigeration and liquefaction systems, measurement techniques, insulation, storage and transfer of cryogenics, safety and handling.

**Requisites:** (M E 361 or PHYSICS 415) and (CBE/B M E 320 or M E 364), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**M E/CBE 567 – SOLAR ENERGY TECHNOLOGY**

3 credits.

Radiant energy transfer and its application to solar exchangers; energy balances for solar exchangers, review of theory, economics, and practice of solar energy applications.

**Requisites:** (M E 364, CBE 326, or concurrent enrollment), or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 569 – APPLIED COMBUSTION**

3 credits.

Introduction to and analysis of combustion processes and combustion technology for gaseous, liquid, and solid fuels. Application to combustion engines, furnaces, fixed-bed, fluidized-bed, and suspension burning boilers.

**Requisites:** M E 364, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M E/E M A 570 – EXPERIMENTAL MECHANICS**

3 credits.

Experimental methods for design and analysis of mechanical components, structures and materials. Electrically and optically recorded stress, strain and deformation data; computer acquisition/reduction/presentation techniques; applications to static and transient events, sensors, transducer design, NDT, fracture and residual stresses.

**Requisites:** Senior standing and (M E 306, E M A 303 or 304) or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 572 – INTERMEDIATE GAS DYNAMICS**

3 credits.

Thermodynamics and fluid dynamics of compressible gas flows with friction and heat transfer, and application to nozzles, shock tubes and propulsion devices. Wave phenomena and engine port tuning. Physics of high temperature gases and equilibrium, non-equilibrium and frozen flows.

**Requisites:** M E 363, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 573 – COMPUTATIONAL FLUID DYNAMICS**

3 credits.

Provides an in-depth introduction to the methods and analysis techniques used in computational solutions of fluid mechanics and heat transfer problems. Model problems are used to study the interaction of physical processes and numerical techniques. Contemporary methods for boundary layers, incompressible viscous flows, and inviscid compressible flows are studied. Finite differences and finite volume techniques are emphasized. Knowledge of programming language such as Python, C++, MATLAB or Java required.

**Requisites:** M E 363, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/E C E 577 – AUTOMATIC CONTROLS LABORATORY**

4 credits.

Control theory is reduced to engineering practice through the analysis and design of actual systems in the laboratory. Experiments are conducted with modern servo systems using both analog and digital control. Systems identification and modern controls design are applied to motion and torque control.

**Requisites:** M E 346 or E C E 332, or graduate/professional standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**M E 601 – SPECIAL TOPICS IN MECHANICAL ENGINEERING**

1-3 credits.

Advanced topics of special interest in various areas of Mechanical Engineering, such as vibrations, balancing, lubrication and wear, special manufacturing processes, automation, energy systems, etc.

**Requisites:** Senior standing or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E/B M E 603 – TOPICS IN BIO-MEDICAL ENGINEERING**

1-3 credits.

Various aspects of living systems of interest to the mechanical engineer, such as the mechanics of hearing and vision, cardiac and central nervous systems, artificial organs, blood flow behavior, and energy-transfer processes.

**Requisites:** Senior standing or member of Engineering Guest Students

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**M E/B M E 615 – TISSUE MECHANICS**

3 credits.

Focus on solid mechanics of prominent musculoskeletal and cardiovascular tissues. Their normal and pathological behaviors (stiffness, strength, relaxation, creep, adaptive remodeling, etc.) in response to physiologic loading will be examined and quantified.

**Requisites:** M E 306 or E M A 303, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/I SY E 641 – DESIGN AND ANALYSIS OF MANUFACTURING SYSTEMS**

3 credits.

Covers a broad range of techniques and tools relevant to the design, analysis, development, implementation, operation and control of modern manufacturing systems. Case studies assignments using industry data will be used to elaborate the practical applications of the theoretical concepts.

**Requisites:** I SY E 315, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **M E/I SY E 643 – PERFORMANCE ANALYSIS OF MANUFACTURING SYSTEMS**

3 credits.

Examines the state of the art in the use of stochastic network theory to develop performance models of modern manufacturing systems.

**Requisites:** (I SY E 624 or I SY E/MATH/OTM/STAT/I SY E/MATH/OTM 632) and (COMP SCI 200, 220, 300, 301, 302, 400, or placement into COMP SCI 300), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **M E 669 – ENGINE EXPERIMENTS**

3 credits.

Hands-on experience with engine hardware testing, especially as it relates to required information for setting up and validating computational models.

**Requisites:** M E 364, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

### **M E 673 – INTERNAL COMBUSTION ENGINE SIMULATIONS**

3 credits.

Hands-on experience with engine CFD (computational fluid dynamics) simulations and use of engine data to validate computational predictions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

### **M E 699 – ADVANCED INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **M E 702 – GRADUATE COOPERATIVE EDUCATION PROGRAM**

1-2 credits.

Work experience that combines classroom theory with practical knowledge of operations to provide students with a background on which to develop and enhance a professional career. The work experience is tailored for MS students from within the U.S. as well as eligible international students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **M E/E M A 703 – PLASTICITY THEORY AND PHYSICS**

3 credits.

Physical foundations of plasticity as a basis for choices made in the formulation of theories representing plastic deformation and their limitation. Motion of dislocations and formation and growth of deformation twins. Experimental results in the context of plasticity models. Traditional and research topics of plasticity and theories for rate-independent, rate-dependent, single and polycrystal descriptions. Numerical solution of equations and computational plasticity. Knowledge of mechanics of materials [such as E M A 303 or M E 306] and continuum mechanics [such as E M A 622] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **M E/E M A 706 – PLATES, SHELLS AND PRESSURE VESSELS**

3 credits.

Stress and deflection analysis of structural plates and membranes under mechanical and thermal loads; variational and numerical methods; instability and vibrations; membrane shell theory; cylindrical shells; pressure vessel and piping design applications; ASME Pressure Vessel Code. Knowledge of mechanics of materials [such as M E 444 or E M A 506] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **M E/E M A 708 – ADVANCED COMPOSITE MATERIALS**

3 credits.

Contemporary topics such as new materials; smart materials/structures/systems; fatigue; fracture; experimental techniques; nondestructive evaluation; transient, micro, three-dimensional, nonlinear, inelastic and environmental effects; manufacturing methods: repair and applications. Knowledge of composite materials [such as E M A/CIV ENGR/M E 508] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **M E/B M E 715 – ADVANCED TISSUE MECHANICS**

3 credits.

Central topics in solid mechanics applied to soft tissues, including analysis of strain in the setting of large deformations, computation of stress in multiple experimental loading configurations, constitutive modeling of biomaterials using hyperelastic strain-energy functions, modeling tissue growth and remodeling, and the main theories for soft tissue failure will be covered. Application of finite elasticity theory in practical laboratory situations, and key papers and concepts in soft tissue mechanics.

**Requisites:** (BME/ME 615 or EMA 622) and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No



**M E 717 – ADVANCED POLYMER PROCESSING**

3 credits.

Advanced analysis and modeling of plastics extrusion, injection molding, and other processes; mold and equipment design; materials consideration. Knowledge of polymer processing [such as M E 417] strongly encouraged.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing and Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**M E 718 – MODELING AND SIMULATION IN POLYMER PROCESSING**

3 credits.

This course is designed to acquaint the student with computer simulation technology used for the engineering of polymer processes. Knowledge of polymer processing [such as M E 417] strongly encouraged.

**Requisites:** Graduate/professional standing or declared in Capstone Certificate in Polymer Processing and Manufacturing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E/E M A 722 – INTRODUCTION TO POLYMER RHEOLOGY**

3 credits.

Formulation of constitutive equations using embedded base vectors. Viscosity, normal stress differences, stress relaxation, elastic recoil. Polymer rheology; homogeneous strain history. Knowledge of differential equations [such as MATH 320] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**M E/E C E 739 – KINEMATICS, DYNAMICS, AND CONTROL OF ROBOTIC MANIPULATORS**

3 credits.

Robotics analysis and design, focusing on the analytical fundamentals specific to robotic manipulators. Serial chain robotic manipulator forward and inverse kinematics, differential kinematics, dynamics, motion planning, and controls. Knowledge of linear algebra [such as MATH 320], high-level computational programming language such as MATLAB, and system dynamics [such as M E 340] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 740 – ADVANCED VIBRATIONS**

3 credits.

Vibration of mechanical components subject to dynamic loads; analytical, numerical and finite element methods applied to the analysis and design of mechanical systems consisting of cables, bars, shafts, beams, frames, rings, membranes, plates and shells. Knowledge of vibrations [such as M E 440] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 746 – DYNAMICS OF CONTROLLED SYSTEMS**

3 credits.

Emphasis on obtaining equations which define the behavior of physical systems frequently subjected to control; mechanical processing, fluid power, and thermal systems; analytical, experimental, and computer techniques. Knowledge of Automatic Controls [such as M E 446 or E C E 332] is required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E 747 – ADVANCED COMPUTER CONTROL OF MACHINES AND PROCESSES**

3 credits.

Digital control theory, design methodology, and techniques for controller implementation on digital computers. Advanced single and multi-axis motion generation algorithms. Multiple processor control systems. Multiple objective control systems for machinery guidance and manufacturing processes. Precision control. Knowledge of digital control [such as M E 447] strongly encouraged.

**Requisites:** (M E 446 or E C E 332) and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**M E 748 – OPTIMUM DESIGN OF MECHANICAL ELEMENTS AND SYSTEMS**

3 credits.

Formulation and solution of mechanical design problems by use of mathematical programming methods.

**Requisites:** M E 548 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**M E 751 – ADVANCED COMPUTATIONAL DYNAMICS**

3 credits.

Overview of techniques used to understand the time evolution (dynamics) of multi-body mechanical engineering systems. Modeling, equation formulation, and numerical methods used to determine the dynamics of multi-body mechanical systems. Rigid and flexible multi-body dynamics, friction and contact. Knowledge of Python or MATLAB strongly recommended. Knowledge of dynamic systems [such as M E 240 or 340] required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**M E 753 – FRICTION, LUBRICATION AND WEAR**

3 credits.

Behavior of frictional surfaces under different types of loading. Mechanisms of heat generation and surface damage (wear, scuffing, pitting, fretting, etc.). Rheological effects. Effect of lubrication. Surface interaction in metal cutting. Design considerations. Knowledge of mechanics/strength of materials [such as E M A 303 or M E 306] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**M E 758 – SOLID MODELING**

3 credits.

Mathematical modeling, computer representations, and algorithms for manipulation of two- and three-dimensional shapes on a computer. Applications of shape modeling to design, representation, and analysis of mechanical parts and processes; other engineering and scientific applications of shape and solid modeling. Knowledge of advanced programming [such as COMP SCI 400] and knowledge of linear algebra [such as MATH 340] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**M E/COMP SCI/E C E/E M A/E P 759 – HIGH PERFORMANCE COMPUTING FOR APPLICATIONS IN ENGINEERING**

3 credits.

An overview of hardware and software solutions that enable the use of advanced computing in tackling computationally intensive Engineering problems. Hands-on learning promoted through programming assignments that leverage emerging hardware architectures and use parallel computing programming languages. Students are strongly encourage to have completed COMP SCI 367 or COMP SCI 400 or to have equivalent experience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**M E 761 – TOPICS IN THERMODYNAMICS**

3 credits.

Thermostatic behavior of nonideal gases; equations of state, with emphasis on their empirical and statistical development, including mixture rules; more detailed study of chemical and phase equilibrium; selected applications of the foregoing; real gas processes, combustion, direct energy conversion devices. Knowledge of thermodynamics [such as M E 561] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**M E 764 – ADVANCED HEAT TRANSFER I-CONDUCTION**

3 credits.

Analytical methods in conduction; Bessel functions, separation of variables, Laplace transforms, superposition, oscillating solutions; computer methods; finite differences, finite elements. Knowledge of basic heat transfer [such as M E 564] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**M E 768 – PRECISION MEASUREMENTS**

3 credits.

General concepts for predicting, characterizing, and reducing noise in measurements. Address the key questions of all experimentalists: (1) How can I improve my signal-to-noise ratio? (2) What is the ultimate detection limit of my measurement approach? Knowledge of Matlab programming and basic circuit design [such as E C E 230] is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**M E 769 – COMBUSTION PROCESSES**

3 credits.

Combustion theory and practice. Thermodynamics of combustion, flame theory, detonation, spray and droplet combustion related to various engine applications. Knowledge of internal combustion engines [such as M E 469], thermodynamics [such as M E 561], and combustion [such as M E 569] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**M E 770 – ADVANCED EXPERIMENTAL INSTRUMENTATION**

3 credits.

Theory and design of instruments for transient physical phenomena especially related to internal combustion engines. Basic knowledge of kinetic theory of gases, statistical mechanics, and quantum mechanics for gases, and measurement theory [such as M E 601: Physics of Gases] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M E 774 – CHEM KINETICS OF COMBUST SYSTEMS**

3 credits.

Application of gas-phase chemical reaction rate theory to power and propulsion systems, both earthbound and airborne. Aerothermochemistry, kinetics of combustion reactions, kinetics related to air pollutant generation. Development and comparison of transition state theory, collision theory and bond-energy-bond-order method. Intermediate knowledge of thermodynamics and combustion and basic understanding of kinetic theory of gases, statistical mechanics, and quantum mechanics for gases [such as M E 601: Physics of Gases] required.

**Requisites:** M E 569 and graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E/CIV ENGR/E M A 775 – TURBULENT HEAT AND MOMENTUM TRANSFER**

3 credits.

Stochastic methods in turbulent heat and momentum transfer; fully developed turbulence; numerical methods including model applications to boundary layers, reacting flows, mass transfer, and unsteady flows; linear and non-linear stability and transition; emphasis on applications of interest to Mechanical, Aerospace, and Environmental Engineers. Knowledge of fluid mechanics [such as M E 363 or CBE 320] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M E/E P 777 – VACUUM TECHNOLOGY**

3 credits.

Topics defining modern vacuum technology, including the kinetic theory of gases, conductance, pumping systems, pump technologies, pressure measurement, gas-surface interactions, sealing technologies, leak detection, and residual gas analysis will be addressed through a combination of lectures, laboratory activities, problem solving, and group discussions. Knowledge of fluid mechanics [such as M E 363 or B M E 320] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M E 790 – MASTER'S RESEARCH AND THESIS**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Declared in a Mechanical Engineering graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 890 – PHD RESEARCH AND THESIS**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Declared in a Mechanical Engineering graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 903 – GRADUATE SEMINAR**

0 credits.

Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 964 – SPECIAL ADVANCED TOPICS IN MECHANICAL ENGINEERING**

1-3 credits.

Advanced topics in design, manufacturing, energy, etc.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 990 – DISSERTATOR RESEARCH AND THESIS**

1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Declared in Mechanical Engineering PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M E 999 – ADVANCED INDEPENDENT STUDY**

1-5 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

# MEDICAL GENETICS (MD GENET)

## MD GENET/GENETICS 565 – HUMAN GENETICS

3 credits.

Principles, problems, and methods of human genetics. Surveys aspects of medical genetics, biochemical genetics, molecular genetics, cytogenetics, quantitative genetics, and variation as applied to humans.

**Requisites:** Graduate/professional standing, GENETICS 466, 468, or BIOCORE 587

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## MD GENET/BIOCHEM/GENETICS 620 – EUKARYOTIC MOLECULAR BIOLOGY

3 credits.

Focuses on the basic molecular mechanisms that regulate DNA, RNA, and protein metabolism in eukaryotic organisms.

**Requisites:** BIOCHEM 501, 508 or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## MD GENET/GENETICS/POP HLTH 636 – PUBLIC HEALTH GENOMICS

1 credit.

Provides an introduction to public health genomics through a review of fundamental principles of genetics, the use of genetic information in clinical and research settings, and its implications for disease management and prevention, and health promotion. Explores policies that guide public health and discusses current ethical, legal, and social implications of these policies.

**Requisites:** (Junior standing and BIOLOGY/BOTANY/ZOOLOGY/ BIOLOGY/BOTANY 151) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

## MD GENET/GENETICS 662 – CANCER GENETICS

3 credits.

Cancer remains one of the most difficult health issues facing our society. There is hope in the horizon due to an increasing understanding of both genetic and epigenetic alterations in cancer. In particular, DNA sequencing of human cancers is becoming more common in major health care centers, and there is expectation that this technology will allow for personalized medicine. Thus, there has been a rapid increase in this knowledge over the last decade. Become aware of the current major issues in cancer research and critically evaluate the cancer genetics literature.

**Requisites:** GENETICS 466, 467 or BIOCORE 383

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## MD GENET/GENETICS 677 – ADVANCED TOPICS IN GENETICS

1-3 credits.

Contents vary; consideration of subjects not included in the curriculum.

**Requisites:** Graduate/professional standing, GENETICS 466, 468, or BIOCORE 383

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

## MD GENET 699 – INDEPENDENT READING

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

## MD GENET/GENETICS 707 – GENETICS OF DEVELOPMENT

3 credits.

A research-level analysis of the current status of the investigation of processes controlling differential gene activity and cellular behavior. The major emphasis is genetic. In successive years, the focus moves from the gene to the cell to the organism.

**Requisites:** Declared in Genetics graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MD GENET/GENETICS 708 – METHODS AND LOGIC IN GENETIC ANALYSIS**

3 credits.

Contemporary issues in genetic, developmental, cell, and molecular biology are addressed in a discussion format. Invited speakers give research lectures and reading material is taken from the primary literature. The discussion focuses on evaluating genetic approaches to biological problems.

**Requisites:** Declared in Genetics graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MD GENET 911 – MODERN CLINICAL GENETICS: HOW TO APPROACH A RAPIDLY CHANGING FIELD**

2 credits.

Genetics and genomics are rapidly evolving fields. In modern clinical care settings, clinicians will be exposed to genetic and genomic data, including that brought by patients, and knowing how to read genetic and genomic data is increasingly necessary in clinical practice. Genetics and genomics in a clinical setting spans a wide range of topics including diagnosis and treatment of genetic diseases. Familiarity with clinical genetic analysis, and the genetic approaches used in basic science, helps medical students better understand genetic disease background. Learn how to bridge basic concepts of human genetics and clinical genetics (actual diseases). Emphases will include research into human genetic diseases, including designing genetic testing, using model organisms and/or cell culture systems, and the development of genetic testing technologies.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MD GENET 999 – INDEPENDENT WORK**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2010

**MEDICAL HISTORY AND BIOETHICS (MED HIST)****MED HIST/HIST SCI/HISTORY 132 – BEES, TREES, GERMS, AND GENES: A HISTORY OF BIOLOGY**

3 credits.

How did today's biology emerge out of the diverse traditions of agriculture and natural history (bees and trees), biomedicine and molecular biology (germs and genes), which stretch back into the eighteenth century? Examines classic texts and "game-changers" in the history of biology, putting them into broader scientific and social contexts to see how these different ways of knowing intertwined, competed, and yielded novel approaches to the study of life that still shape today's life sciences.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST/HIST SCI 212 – BODIES, DISEASES, AND HEALERS: AN INTRODUCTION TO THE HISTORY OF MEDICINE**

3 credits.

A survey of different conceptions of how the body as a site of sickness has been understood from Antiquity to contemporary medicine. Includes consideration of the origins and evolution of public health, the changing social role of healers, and the emergence of the modern "standardized" body in health and illness.

**Requisites:** None

**Course Designation:** Breadth - Humanities Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST/HIST SCI 218 – HISTORY OF TWENTIETH CENTURY AMERICAN MEDICINE**

3 credits.

Introduction to the development of the modern American medical care system.

**Requisites:** None

**Course Designation:** Breadth - Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MED HIST/ANTHRO 231 – INTRODUCTION TO SOCIAL MEDICINE**  
3 credits.

Provides analytical tools for the critical examination of the social, cultural, political and economic determinants of health conditions and medical practice. Pays special attention to how these factors determine how patients and providers experience and ideate disease and treatment, and how they respond to specific health care policies. Emphasizes the important role that conditions of structural violence and inequality play as determinants of health conditions in a globalized world.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**MED HIST/HIST SCI 284 – PHYSICIAN IN HISTORY (HONORS)**  
1 credit.

A survey of different conceptions of how the body as a site of sickness has been understood from Antiquity to contemporary medicine. Includes consideration of the origins and evolution of public health, the changing social role of healers, and the emergence of the modern "standardized" body in health and illness.

**Requisites:** Declared in an Honors program and concurrent enrollment in HIST SCI/MED HIST/HIST SCI 212

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MED HIST 286 – HONORS SEMINAR: STUDIES IN MEDICAL HISTORY**  
3 credits.

Intensive exploration of issues in medical history. Emphasis on developing critical thinking about medical history through discussion of readings, written exercises, and research projects.

**Requisites:** Declared in an Honors program

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**MED HIST/HIST SCI/RELIG ST 331 – SCIENCE, MEDICINE AND RELIGION**  
3 credits.

Introduction to the study of religion, science, and medicine. Focus on how religion, science, and medicine have shaped practices of knowledge production and meaning making with respect to human life, by considering theories of human history and racial progress; how logics of contagion structure human relationships and communal boundaries; the variety of ways of understanding and caring for bodies; and the place of humans within broader ecologies.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MED HIST/HIST SCI 333 – HISTORY OF MODERN BIOLOGY**  
3 credits.

Exploration of major developments in biology and related sciences ca. 1700. Topics may draw from morphology, embryology, and cell biology; evolution, ecology, and genetics; physiology, microbiology, and recent experimental biology.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MED HIST/PHILOS 344 – FOOD ETHICS**  
3 credits.

There are many ethical issues related to food production, distribution, consumption, and policy, including animal welfare, animal rights, vegetarianism and veganism, environmental impact, treatment of workers, prospects for agricultural reform, ethical responsibilities of corporate and industry actors, and labeling issues surrounding the use of genetically engineered foods. Some are more theoretical, such as which individuals affected by agriculture deserve direct moral consideration. Other are more practical, such as how to feed a growing global population. We will begin with a brief survey of ethical theories and methods of ethical reasoning, and then explore, from both personal and policy perspectives, several food ethics issues. Among the aims of the course are the goals of helping you think critically about the ethically relevant impacts of your own food choices and improving your understanding of ethical issues implicated in food systems.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**MED HIST/PATH-BIO 370 – ADDRESSING CONTROVERSY: THE SCIENCE, ETHICS, AND PUBLIC DISCUSSION OF ANIMAL RESEARCH**

3 credits.

Addresses the science, ethics, history, and communication strategies associated with the use of animals in research. Seeks to identify and employ common ground among those with different perspectives to enable students to make good decisions about this contentious topic.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Breadth – Either Humanities or Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST/HIST SCI/HISTORY 394 – SCIENCE IN AMERICA**

3 credits.

From the colonial period to the present; emphasis on the development of scientific institutions and the influence of science on American life.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**MED HIST/PHILOS 505 – JUSTICE AND HEALTH CARE**

3 credits.

Examines ethical issues in the distribution, financing, and delivery of health care (primarily in the United States). Explores key issues in U.S. health policy and forms the empirical foundation for the rest of the class. Engages in ongoing debates in moral and political philosophy over putative entitlements to health and health care. Investigates the nature, justifiability, and methods of health care rationing (including bedside rationing by doctors) and the myriad issues implicated by the near-universally shared goal of health care cost containment.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**MED HIST/HIST SCI/HISTORY 507 – HEALTH, DISEASE AND HEALING I**

3–4 credits.

Medicine in Europe from antiquity to the 18th century, investigating changes in medical ideas, institutions, practices, and organization.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MED HIST/HIST SCI/HISTORY 508 – HEALTH, DISEASE AND HEALING II**

3–4 credits.

Medicine in Europe from the 18th century to mid-20th century, investigating changes in disease and demography, state interest in health care, the medical professions, and both scientific and alternative medical ideas.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MED HIST/HIST SCI 509 – THE DEVELOPMENT OF PUBLIC HEALTH IN AMERICA**

3 credits.

Health problems in the U.S. from the colonial period to the twentieth century; efforts made toward their solutions.

**Requisites:** Junior standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST/PHILOS 515 – PUBLIC HEALTH ETHICS**

3 credits.

Focuses on ethical issues implicated in a population-level approach to disease prevention and health promotion. Explores prominent theoretical approaches to public health ethics and engages with several ethical tensions. Example issues include: the use of coercive or intrusive public health; the justification of paternalistic measures in societies; the extent to which societies should hold individuals responsible for their health conditions; the need to decide who receives life-saving treatment or vaccination; and climate changes and intergenerational justice; ethical issues in international pharmaceutical research.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



### **MED HIST/AFROAMER/HIST SCI 523 – RACE, AMERICAN MEDICINE AND PUBLIC HEALTH**

3 credits.

Provides historical perspectives on current dilemmas facing black patients and health care professionals.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **MED HIST/ENGL/HIST SCI 525 – HEALTH AND THE HUMANITIES**

3 credits.

Explores how a humanistic perspective can broaden our understanding of health and medicine. Specifically, we will examine the role of language and culture in the creation and circulation of biomedical knowledge; our lived experiences with illness (physical and mental); the intricate intersections of race, gender, sexuality, disability and medicine; the political dimensions of diagnosis, disease, and epidemics, and the role that fiction, creative non-fiction, comics, and film play in shaping our experiences with health and medicine as health care providers and as patients. The course does not assume any background in science or medicine. One of our recurrent topics, in fact, will be to consider how non-experts interact with medicine and its technical vocabularies. Although the primary objective of the course is to understand the cultural, social, and political dimensions of health and medicine, a secondary objective is for students to become more savvy patients and, for the few students who might emerge on the other side of the stethoscope one day, more well rounded health care professionals.

**Requisites:** Declared in the Health and the Humanities certificate

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MED HIST/GEN&WS/HIST SCI 531 – WOMEN AND HEALTH IN AMERICAN HISTORY**

3 credits.

Women as patients and as health professionals in America from the colonial period to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### **MED HIST/GEN&WS/HIST SCI 532 – THE HISTORY OF THE (AMERICAN) BODY**

3 credits.

This course demonstrates that human bodies have social and cultural histories. It will highlight the social values placed on different bodies, the changing social expectations bodies create, and the role of science and medicine in creating the cultural meanings of bodies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MED HIST/PHILOS 534 – ETHICS AND THE BRAIN**

3 credits.

In-depth analysis of ethical issues arising from the practices and advances of brain science in clinical, research, legal, and consumer contexts. Includes a foundation in ethical theory and philosophical methodology.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **MED HIST 545 – ETHICAL AND REGULATORY ISSUES IN CLINICAL INVESTIGATION**

1 credit.

Explores and examines the ethical issues central to clinical research, regulations governing clinical investigation, and the role of good clinical practice for clinical trials.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MED HIST/HIST SCI/POP HLTH 553 – INTERNATIONAL HEALTH AND GLOBAL SOCIETY**

3 credits.

Major problems in international health from 1750 to the present. Focus on disease epidemiology and ecology; political economy of health; migration; quarantine; race, ethnicity, and health care; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

**Requisites:** Junior standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MED HIST/PHILOS 558 – ETHICAL ISSUES IN HEALTH CARE**

3 credits.

Ethical issues apparently created by new biomedical technologies, such as genetic screening, prenatal diagnosis, prolongation of life, treatment of severe birth defects, in vitro fertilization, behavior modification, psychosurgery, and transplantation.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED HIST 559 – TOPICS IN ETHICS AND HISTORY OF MEDICINE**

3 credits.

A survey of ethical and social issues in medical ethics and history of medicine. Cooperating faculty may be drawn from philosophy, law, medical ethics, history, political science, public health, economics, education, and communication, as well as medicine and the biological sciences.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**MED HIST/HIST SCI/HISTORY 564 – DISEASE, MEDICINE AND PUBLIC HEALTH IN THE HISTORY OF LATIN AMERICA AND THE CARIBBEAN**

3 credits.

Examines the history of illness and medical practice in Latin America and the Caribbean from the colonial era until the present. Using an interdisciplinary set of sources, students will explore the different meanings of disease, body normativity, medical practice, and ideas about public health across different historical circumstances in the region.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**MED HIST/AGRONOMY/C&E SOC/PHILOS 565 – THE ETHICS OF MODERN BIOTECHNOLOGY**

3 credits.

An in-depth study of a selection of ethical issues arising from the application of modern biotechnology to microorganisms, plants, non-human animals, and human beings. We will aim at a discussion that is informed by empirical research and by work done in ethical theory, political philosophy, and other relevant disciplines, and whose character is rigorous, clear, nuanced, and unbiased.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**MED HIST/ENGL/HIST SCI 599 – DIRECTED STUDY IN HEALTH AND THE HUMANITIES**

1 credit.

Offers students enrolled in the Health and the Humanities certificate an opportunity to conduct independent research under the guidance of a faculty member. It allows students who have enrolled in or completed a Health and the Humanities Capstone an opportunity to go into greater depth on a topic covered in the capstone course. In consultation with a faculty member, students will design a project that builds on lessons learned or work completed as part of their capstone experience.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**MED HIST/CRB 615 – REGENERATIVE MEDICINE ETHICS AND SOCIETY**

3 credits.

Study of regenerative medicine and stem cell research within social, ethical and political contexts.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED HIST/HIST SCI 668 – TOPICS IN HISTORY OF MEDICINE**

3 credits.

Upper-level special topics course in the history of medicine.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016

**MED HIST 699 – INDEPENDENT STUDY IN MEDICAL HISTORY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**MED HIST 708 – HEALTH, DISEASE AND HEALING II**

1 credit.

Advanced readings in primary and secondary literature concerning medicine in Europe from the 18th century to mid-20th century, investigating changes in disease and demography, state interest in health care, and medical professions, and both scientific and alternative medical ideas.

**Requisites:** Graduate/professional standing and concurrent enrollment in HIST SCI/HISTORY/MED HIST/HIST SCI/HISTORY 508**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**MED HIST 709 – DEVELOPMENT OF PUBLIC HEALTH IN AMERICA**

1 credit.

Advanced readings in primary and secondary literature concerning public health issues and problems in America from the eighteenth to the twentieth century, and efforts made toward their solutions.

**Requisites:** Graduate/professional standing and concurrent enrollment in HIST SCI/MED HIST/HIST SCI 509**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED HIST 729 – INTRODUCTION TO BIOETHICS**

1 credit.

Opportunity to learn and employ foundational methods and principles of bioethics. Gain an understanding of modes of argument in bioethics and hone the craft of analyzing and constructing ethical arguments, and foreseeing and responding to potential objections.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MED HIST 730 – TOPICS IN BIOETHICS**

1 credit.

Survey in bioethics aimed at students in the health sciences. Topics to include a mix of important perennial issues and emerging problems.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED HIST 734 – GRADUATE STUDIES IN MEDICAL ETHICS**

1-3 credits.

Graduate level special topics course in medical ethics or bioethics more broadly.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**MED HIST 740 – NARRATIVE MEDICINE AND PUBLIC HEALTH**

2 credits.

Narrative medicine is the practice of using stories to understand health and illness in the context of people's lives. Whether through fiction or nonfiction, poetry or prose, text or graphics, giving voice to the stories of patients and caregivers allows their experiences to be heard, made sense of, and valued. Learning to listen to others and to express one's own vulnerabilities are valuable tools for all health practitioners, but they are especially valuable in the context of public health. The scope of public health interventions encourages practitioners to think in terms of populations, but efforts to improve quality of life through prevention must ultimately be grounded in individual lives. Explore how narrative medicine techniques can enrich the practice of public health, both through the power of listening to stories to understand how individuals experience health and through the power of telling stories to mobilize communities.

**Requisites:** (MED SC-M 810, 811, 812 and 813) or declared in Physician Assistant, Nursing, Physical Therapy, Pharmacy, or Genetic Counselor Studies.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED HIST 741 – ETHICAL ISSUES IN PUBLIC HEALTH**

2 credits.

Analyze ethical dimensions of population-level efforts to protect and promote health. Gain understanding of different ethical frameworks, their theoretical underpinnings, and their prospects for resolving real-world policy dilemmas in the context of medicine and public health. Hone the craft of constructing ethical arguments, and foreseeing and responding to potential objections.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**MED HIST 742 – ETHICS AND U.S. HEALTH CARE POLICY**

2 credits.

Understand and analyze the U.S. health care system through the lens of ethical criticisms made by and on behalf of the diverse populations it serves. Gain understanding of philosophical debates over universal health insurance coverage, fair health care financing, effective cost-containment, and rationing. Hone the craft of constructing ethical arguments, and foreseeing and responding to potential objections.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED HIST 744 – INTRODUCTION TO THE MEDICAL HUMANITIES**

2 credits.

Introduction to the medical humanities and their application to clinical practice, utilizing a variety of humanistic approaches, drawing from history, philosophy, anthropology, literary studies, and religious studies. Engage with a variety of forms of expression, including essays, poetry, film, podcasts, music, and visual art. These humanistic approaches complement the science-focused approach of contemporary medical education by enhancing students' ability to offer more compassionate and culturally competent care, and helping students build resiliency through using artistic forms of expression to process their experiences. Engage with the medical humanities through a different theme, such as the doctor-patient relationship, death and dying, or healing and wholeness.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST 745 – CLINICAL ETHICS - INDIVIDUAL AND POPULATION CONSIDERATIONS**

2 credits.

Examine how ethical issues in clinical practice affect public health outcomes. Gain an understanding of the ethical frameworks and practices that are employed in medicine, in order to understand the complex interplay between public health and clinical care. Develop the ability to identify the ethically salient features of a patient case and to employ ethical analysis to generate recommendations that improve public health outcomes.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST 746 – RACE, SCIENCE, AND MEDICINE: PAST AND PRESENT**

2 credits.

Examine ideas about race and ethnicity and their relationship to the history of "Western" medicine and science. Analyze the role of social, economic, cultural, and political developments in the shaping of scientific and medical notions of race and bodily difference. Study how skin color (and other elements of "racial identity") has influenced the experiences of patients and populations, physicians and nurses, and medical researchers. Discuss how conceptions of race have shaped both the health concerns and health outcomes of Americans in the past three hundred years, and the structure of medical institutions in the United States. Topics include the origins of racial classification, race and colonialism, the health and medical care of the enslaved, the use of enslaved people as research subjects, the history of racial disparities in medicine, structural racism of the medical establishment, race and reproduction, and the struggle for justice in health care during the past few decades.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST 750 – OUTBREAK!: EPIDEMICS, MIGRATION, AND THE CHANGING CONTOURS OF GLOBAL HEALTH**

2 credits.

Explore national and international health projects aimed to address infectious disease epidemics in the context of changing ideas about human difference, the shifting economic and socio-political dimensions of international health, and the history of migration. Using a range of sources from historical documents, social science, films, and biomedical research, explore circumstances linking ideas about "alien" people (a term historically used to talk about enslaved people, Native Americans, minorities, and immigrants), and "plagues." Examine the relationship between ideas about disease and migration, risk factors and disease patterns related to migration, migrant populations' access to health-care resources, perceived threats of infectious diseases related to migrant populations and the ways such threats have shaped medical theories, and the institutional landscape of global health.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED HIST 753 – INTERNATIONAL HEALTH AND GLOBAL SOCIETY**

1 credit.

Advanced readings that examine major problems in modern international health. Focus on epidemiology and disease ecology; political economy of health; migration; quarantine; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

**Requisites:** Graduate/professional standing and concurrent enrollment in HIST SCI/MED HIST/POP HLTH/HIST SCI/MED HIST 553

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MED HIST 890 – READING AND RESEARCH**

1-3 credits.

Independent reading, research and writing for medical professional students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**MED HIST/HIST SCI 919 – GRADUATE STUDIES IN MEDICAL HISTORY**

3 credits.

Analyzes the scientific and social aspects of the development of modern medicine and public health in Europe and America.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**MED HIST 999 – ADVANCED INDEPENDENT STUDY**

1-3 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

## MEDICAL MICROBIOLOGY AND IMMUNOLOGY (M M & I)

**M M & I 301 – PATHOGENIC BACTERIOLOGY**

2 credits.

Medically important bacteria, emphasizing the process of pathogenesis and host/parasite interactions, as well as intervention strategies, immunity and genetics as they apply to the pathogens.

**Requisites:** (BIOCORE 381 and 382), (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M M & I 341 – IMMUNOLOGY**

3 credits.

An introduction to the immune response to infectious disease. Examines the role of the host in host-parasite relationships using select microbial agents or antigens to illustrate the nonspecific and specific mechanisms of host defenses. Includes study of the nonspecific inflammatory response, the nature of microbial antigens, current concepts of antibody and cell-mediated immune reactions to infectious agents and the principles underlying the development of vaccines.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 381

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**M M & I/ENTOM/PATH-BIO/ZOOLOGY 350 – PARASITOLOGY**

3 credits.

The biology of water-borne, food-borne, soil-borne and vector-borne parasites of animals including humans. Parasites are explored in the context of transmission, associated disease, diagnosis and treatment options, and environmental, cultural and socioeconomic drivers of disease epidemiology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY 153, or BIOCORE 381

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M M & I/PATH-BIO 528 – IMMUNOLOGY**

3 credits.

Development and functions of immune response in animals; a comprehensive study of experimental humoral and cellular immunity.

**Requisites:** (CHEM 104 or CHEM 109) and (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 383), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M M & I 554 – EMERGING INFECTIOUS DISEASES AND BIOTERRORISM**

2 credits.

Identification of analysis and solution of emerging infectious disease problems and the problems of bioterrorism.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 101, (BIOCORE 383 and M M & I 301), MICROBIO 101, MICROBIO 303, or graduate/professional standing.

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M M & I/BIOCHEM 575 – BIOLOGY OF VIRUSES**

2 credits.

Broad coverage of animal virology taught at molecular level. Topics include virus structure, viral replication/lifecycle, aspects of pathogenesis and prevention.

**Requisites:** (BIOCORE 381 and 382), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, M M & I 301, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M M & I/POP HLTH 603 – CLINICAL AND PUBLIC HEALTH MICROBIOLOGY**

5 credits.

Describe microorganisms of clinical and public health significance, discuss issues and controversies of specimen receiving and processing, bacteremia, serodiagnosis of infectious agents, antimicrobial susceptibility testing, laboratory management, and novel approaches to detect infectious agents.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**M M & I/BOTANY/GENETICS/PL PATH 655 – BIOLOGY AND GENETICS OF FUNGI**

3 credits.

Fungal genetics, genomics, and physiology using plant pathogenic fungi and the genetic models *Aspergillus nidulans* and *Neurospora crassa* as model systems to explore the current knowledge of fungal genetics and plant/fungal interactions.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**M M & I 677 – ADVANCED TOPICS IN MEDICAL MICROBIOLOGY**

1-3 credits.

Specialized topics of current interest in medical microbiology.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**M M & I 691 – FIRST SEMESTER SENIOR THESIS**

3 credits.

First semester independent study with the goal to do the preliminary research to write a senior thesis in Medical Microbiology Immunology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**M M & I 692 – SECOND SEMESTER SENIOR THESIS**

3 credits.

Second semester independent study with the goal to complete a senior thesis in Medical Microbiology Immunology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**M M & I 696 – CRITICAL THINKING IN MEDICAL MICROBIOLOGY AND IMMUNIOLOGY**

3 credits.

Present assigned research papers from journals for critical evaluation.

Write critiques of each paper evaluating the paper's introduction, methods, results, and discussion sections.

**Requisites:** M M & I 301 and 341

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**M M & I 699 – DIRECTED STUDY**

1-3 credits.

Independent research in medical microbiology and immunology for undergraduates under the supervision of MMI faculty. Carry out literature reviews and laboratory bench work on an independent project; participate in laboratory meetings; and produce some written presentation of the work, usually in the form of a poster presentation at a local or national meeting.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**M M & I 704 – INFECTIOUS DISEASES OF HUMAN BEINGS**

3 credits.

Pathogenesis, clinical descriptions, and prevention.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**M M & I/PATH-BIO 720 – ADVANCED IMMUNOLOGY: CRITICAL THINKING**

3 credits.

Advanced focus on current questions in immunological research. Explores immunology topics including genetic, cellular, and molecular features of immune system fundamental to regulation of immune responses.

**Requisites:** M M I/PATH-BIO/M M & I 528 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**M M & I 740 – MECHANISMS OF MICROBIAL PATHOGENESIS**

3 credits.

Host-pathogen relationships in microbial diseases.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**M M & I/PATH-BIO 750 – HOST-PARASITE RELATIONSHIPS IN VERTEBRATE VIRAL DISEASE**

3 credits.

Detailed study of the pathogenesis of vertebrate viral disease, stressing viral invasion, dissemination, mechanisms of disease production and resistance, and transmission.

**Requisites:** (ONCOLOGY/PL PATH/ONCOLOGY 640 or PATH-BIO 513), M M I/PATH-BIO/M M & I 528, and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**M M & I 901 – SEMINAR**

1 credit.

Seminar series led by MMI faculty members.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**M M & I 902 – THE ROLE OF THE HUMAN MICROBIOME IN HEALTH AND DISEASE**

2 credits.

The human microbiome can profoundly influence the balance between health and disease. Advances in next-generation sequencing technology and bioinformatics enabled the detailed study of the trillions of microorganisms living in us and on us and their associations with both healthy and disease conditions. Current state of the art approaches to study the microbiome through examples of human diseases with a known microbiome component. Critically assess the microbiome literature and design clinical studies aiming to include the microbiome as a variable. Bioinformatics tools required to study complex microbial communities by reproducing published datasets from human patients and learn ecological concepts to interpret results in a clinically meaningful way.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**M M & I 911 – MICROBIOLOGY DIAGNOSTICS IN PUBLIC HEALTH**

2 credits.

Learn firsthand how a public health lab handles testing. Learn about the different areas of testing in the lab from the experts and how we work with the CDC and clinical labs for surveillance, diagnostics, and outbreak response. Useful training for diagnostic testing and those that will order these tests in their practice.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**M M & I/BIOCHEM/BMOLCHEM 914 – SEMINAR-MOLECULAR BIOSCIENCES (ADVANCED)**

1 credit.

During the fall semester, molecular biosciences trainees who have not achieved dissertator status will present seminars based primarily on literature related to their projects. During the spring semester, molecular biosciences trainees with dissertator status will present seminars based upon their own research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**M M & I 990 – RESEARCH AND THESIS**

1-12 credits.

Carry out an independent research project that represents novel science in the chosen area under the guidance of an MMI faculty member. Evidence of success is measured by publication of results as first-authored papers in peer-reviewed papers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## MEDICAL PHYSICS (MED PHYS)

**MED PHYS/PHYSICS 265 – INTRODUCTION TO MEDICAL PHYSICS**

2 credits.

A general interest survey that introduces the principles and applications of medical physics. Topics include biomechanics, energy usage and temperature regulation, pressure, sound and hearing, ultrasound, electricity in the body, optics and the eye, ionizing radiation in diagnosis and therapy, radiobiology, and nuclear medicine.

**Requisites:** PHYSICS 104, 202, 208, or 248

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS/H ONCOL 410 – RADIOBIOLOGY**

2-3 credits.

Effects of ionizing radiations of living cells and organisms, including physical, chemical, and physiological bases of radiation cytotoxicity, mutagenicity, and carcinogenesis; lecture and lab.

**Requisites:** Graduate/professional standing or (PHYSICS 202 or 208 and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or 153)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MED PHYS/B M E/H ONCOL/PHYSICS 501 – RADIATION PHYSICS AND DOSIMETRY**

3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry.

**Requisites:** (PHYSICS 323, 449 and MATH 320) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/N E 506 – MONTE CARLO RADIATION TRANSPORT**

3 credits.

Use of Monte Carlo technique for applications in nuclear engineering and medical physics. Major theory of Monte Carlo neutral particle transport is discussed. Standard Monte Carlo transport software is used for exercises and projects. Major emphasis is on analysis of real-world problems.

**Requisites:** N E 305 and (N E 405, N E 408, BME/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501 or MED PHYS/N E/MED PHYS 569) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MED PHYS 510 – FUNDAMENTALS OF CELLULAR, MOLECULAR, AND RADIATION BIOLOGY**

3 credits.

Cellular, molecular, and radiation biology principles and their common application in medical physics.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/B M E 530 – MEDICAL IMAGING SYSTEMS**

3 credits.

2D Fourier image representation, sampling, and image filtering with applications in medical imaging. Principles of operation, impulse responses, signal-to-noise, resolution and design tradeoffs in projection radiography, tomography, nuclear medicine, ultrasound, and magnetic resonance imaging.

**Requisites:** Graduate/professional standing or (E C E 330 or B M E/MED PHYS/B M E 573)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS/B M E 535 – INTRODUCTION TO ENERGY-TISSUE INTERACTIONS**

3 credits.

Explore physical interactions between thermal, electromagnetic and acoustic energies and biological tissues with emphasis on therapeutic medical applications.

**Requisites:** PHYSICS 202, 208, 248, or MED PHYS/PHYSICS/ MED PHYS 265, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/ISY E 559 – PATIENT SAFETY AND ERROR REDUCTION IN HEALTHCARE**

2 credits.

Techniques for evaluating and reducing risks in medical procedures, including probabilistic risk assessment methods, failure mode and effects analysis, human factors analysis, and quality management. Discussions of patient safety standards, recommendations from agencies, and continual quality improvement.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**MED PHYS 563 – RADIONUCLIDES IN MEDICINE AND BIOLOGY**

2-3 credits.

Physical principles of radioisotopes used in medicine and biology and operation of related equipment; lecture and lab.

**Requisites:** MATH 234 and (PHYSICS 241 or 249) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**MED PHYS/B M E 566 – PHYSICS OF RADIOTHERAPY**

3 credits.

Ionizing radiation use in radiation therapy to cause controlled biological effects in cancer patients. Physics of the interaction of the various radiation modalities with body-equivalent materials, and physical aspects of clinical applications.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/ MED PHYS 501

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS/B M E 567 – THE PHYSICS OF DIAGNOSTIC RADIOLOGY**

4 credits.

Physics of x-ray diagnostic procedures and equipment, radiation safety, general imaging considerations; lecture and lab.

**Requisites:** MATH 234 and (PHYSICS 241 or 249) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**MED PHYS/B M E 568 – MAGNETIC RESONANCE IMAGING (MRI)**

2 credits.

Core course covering the physics associated with magnetic resonance imaging emphasizing techniques employed in medical diagnostic imaging. Major MRI topics include: physics of MR, pulse sequences, hardware, imaging techniques, artifacts, and clinical applications. At the completion of this course, students should have an understanding of the technical and scientific details of modern magnetic resonance imaging and its use in diagnosing disease. Graduate students who have not taken MATH 222 and PHYSICS 202 at UW-Madison must have the equivalent coursework in order to be successful in this course.

**Requisites:** Graduate/professional standing or (MATH 222 and PHYSICS 202, 208, 241, 244, 248 or 249)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MED PHYS/N E 569 – HEALTH PHYSICS AND BIOLOGICAL EFFECTS**

3-4 credits.

Physical and biological aspects of the use of ionizing radiation in industrial and academic institutions; physical principles underlying shielding instrumentation, waste disposal; biological effects of low levels of ionizing radiation; lecture and lab.

**Requisites:** MATH 234 and (PHYSICS 241 or 249) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/B M E 573 – MATHEMATICAL METHODS IN MEDICAL PHYSICS**

3 credits.

Mathematical fundamentals required for medical physics and biomedical applications, including signal analysis and mathematical optimization.

**Requisites:** (MATH 234 and 319), (MATH 234 and 320), or MATH 376 and (PHYSICS 202 or 208), graduate/professional standing, or declared in Medical Physics VISP

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/B M E 574 – DATA SCIENCE IN MEDICAL PHYSICS**

3 credits.

Concepts and principles of statistics and machine learning for medical physics-related research problems. Topics covered include probability and independence, discrete and continuous random variables and statistical distributions, random sampling and central limit theorem, inference for means, variances, proportions, moment generating functions, maximum likelihood, hypothesis testing, ANOVA, linear regression, correlation and basic design of experiments with application to quality assurance, reliability, and reproducibility.

**Requisites:** (MED PHYS/B M E/H ONCOL/PHYSICS/B M E/H ONCOL/MED PHYS 501 and MED PHYS/B M E/MED PHYS 573) or (MATH/STAT/MATH 309 or 431) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS/B M E 575 – DIAGNOSTIC ULTRASOUND IMAGING**

2 credits.

Propagation of ultrasonic waves in biological tissues; principles of ultrasonic measuring and imaging instrumentation; design and use of currently available tools for performance evaluation of diagnostic instrumentation; biological effects of ultrasound.

**Requisites:** Graduate/professional standing or (MATH 234, 319, or 320 and PHYSICS 202 or 208)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**MED PHYS/B M E 578 – NON-IONIZING DIAGNOSTIC IMAGING**

4 credits.

Covers the physics associated with magnetic resonance imaging and diagnostic ultrasound emphasizing techniques employed in medical diagnostic imaging. Major MRI topics include: physics of MR, pulse sequences, hardware, imaging techniques, artifacts, and spectroscopic localization. Ultrasound based topics covered include: propagation of ultrasonic waves in biological tissues, principles of ultrasonic measuring and imaging instrumentation, design and use of currently available tools for performance evaluation of diagnostic instrumentation, and biological effects of ultrasound. Gain an understanding of the technical and scientific details of modern non-ionizing medical magnetic resonance and ultrasound devices and their use in diagnosing disease.

**Requisites:** MATH 234, (MATH 319 or 320) and (PHYSICS 202, 208, 241 or 248), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS/B M E 580 – THE PHYSICS OF MEDICAL IMAGING WITH IONIZING RADIATION**

4 credits.

Concepts and principles on the physics of medical imaging systems that form images using high energy photons are presented. Such systems are divided into two categories: (1) those based on the transmission of x-rays through the human body, including radiography, mammography, fluoroscopy, and computed tomography (CT), and (2) those based on the emission of gamma rays or annihilation radiation following radioactive decay of an internal radiolabeled molecule, including the gamma camera, single photon emission tomography (SPECT), and positron emission tomography (PET) and PET hybrid imaging systems. Emphasis is placed on understanding how physics, system design, and imaging technique determine image performance metrics such as contrast, signal-to-noise ratio, and spatial resolution. Clinical applications and radiation safety concepts are detailed for the different types of imaging systems.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501 and B M E/MED PHYS/B M E 573

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED PHYS 581 – LABORATORY FOR MEDICAL IMAGING WITH IONIZING RADIATION**

1 credit.

Presents concepts and principles on the physics of medical radiographic imaging systems, based on the transmission of x-rays. Emphasis is placed on understanding the operation of imaging equipment and how it is used in clinical applications. Evaluation of imaging systems, optimization of their use and design and the solution of image quality problems is investigated.

**Requisites:** MED PHYS/B M E/MED PHYS 580

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/PHYSICS 588 – RADIATION PRODUCTION AND DETECTION**

4 credits.

Fundamental physics of ionizing radiation production and detection applied to medical science. Topics: scintillator/semiconductor detectors, ionizing radiation detectors, charged and neutral particles for external beam radiotherapy, production of radionuclides with cyclotron and linear accelerators for diagnostic and therapeutic applications, radiochemistry, and X-ray tube physics.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MED PHYS/B M E/PHMCOL-M/PHYSICS/RADIOL 619 – MICROSCOPY OF LIFE**

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

**Requisites:** PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MED PHYS/NTP 651 – METHODS FOR NEUROIMAGING RESEARCH**

3 credits.

Provides a practical foundation for neuroimaging research studies with statistical image analysis. Specific imaging methods include functional BOLD MRI, structural MRI morphometry, and diffusion tensor imaging. Lectures and associated in-class computer exercises will cover the physics and methods of image acquisition, steps and tools for image analyses, the basis for statistical image analyses and interpretation of the results.

**Requisites:** Graduate/professional standing or (PHYSICS 104, 202 or 208)

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MED PHYS 662 – RAD LAB - DIAGNOSTIC RADIOLOGICAL PHYSICS**

1 credit.

Provides hands on experience using and testing radiographic, fluoroscopic and mammographic x-ray systems. Imaging requirements, image quality, and radiation dose aspects of each modality are covered, along with practical methods for evaluating the performance of clinical units.

**Requisites:** B M E/MED PHYS/B M E 567

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **MED PHYS 663 – RAD LAB - NUCLEAR MEDICINE PHYSICS**

1 credit.

Provides an introduction to the technical skills required in nuclear medicine physics. This will include laboratory rotations in basic radiopharmaceutical production and quality control, basic operation and quality control testing on PET and SPECT scanners, time series image analysis of radiotracer studies and nuclear medicine dosimetry and radiation safety training. The student will gain a firsthand understanding of the professional duties performed by a nuclear medicine medical physicist.

**Requisites:** MED PHYS 563

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **MED PHYS 664 – RAD LAB - HEALTH PHYSICS**

1 credit.

Uses project-based learning (PBL) as a powerful teaching method to address common challenges and solutions addressed by medical health physicists. Each semester, students work on a different project that addresses concepts that are important in the current health physics environment.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **MED PHYS 665 – RAD LAB: CT, MRI, AND DSA PHYSICS**

1 credit.

Provides hands on experience using and testing computerized tomography (CT), magnetic resonance imaging (MRI), and digital subtraction angiography (DSA) systems. Image quality, MRI and radiation safety, accreditation, and regulatory compliance issues with these modalities are also covered.

**Requisites:** B M E/MED PHYS/B M E 567 and B M E/MED PHYS/ B M E 568

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MED PHYS 666 – RAD LAB - MEDICAL ULTRASOUND PHYSICS**

1 credit.

Introduces concepts and methodology for measuring acoustic properties of materials and for operating and performing physics tests of state of the art clinical ultrasound scanners. Students set up and operate a laboratory apparatus employing single element ultrasound transducers. This is followed by hands on experiments that challenge students to explain physical and engineering characteristics of clinical scanners, details of operator controls, features of Doppler and color flow modes, and resolution limitations. Practical scanning exercises provide familiarity with selected applications of clinical ultrasound equipment, both for diagnosis and for guiding interventions. Routine quality assurance tests done by medical physicists are also performed.

**Requisites:** B M E/MED PHYS/B M E 575

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MED PHYS 671 – SELECTED TOPICS IN MEDICAL PHYSICS**

1-4 credits.

In-depth examination of current and newly discovered modalities and/or phenomena in medical physics. Critical reading of literature, hands-on lab work and exploration of medical issues related to discoveries will be included.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**MED PHYS 679 – RADIATION PHYSICS METROLOGY**

3 credits.

Metrology, the science of measurement, is a critical component of medical physics. Topics covered: measurement statistics, determination of uncertainty, characteristics of ionization chambers, electrometers and other ionizing radiation measurement devices. Effects of instrumentation on clinical measurements.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS 699 – INDEPENDENT READING OR RESEARCH**

1-3 credits.

Provides opportunities for graduate students to gain experience using the scientific method to address specific scientific problems. This includes selection of a research topic, performing literature reviews to evaluate peer-reviewed and other publications, developing a research design, identifying possible pitfalls, and performing and reporting on experiments performed. Communication of the research findings within and outside the university is encouraged.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED PHYS 701 – ETHICS AND THE RESPONSIBLE CONDUCT OF RESEARCH AND PRACTICE OF MEDICAL PHYSICS**

1 credit.

Addresses the concepts of ethics in the daily practice of medical physics and other scientific disciplines and provide tools for identifying resources. Special emphasis will be placed in how these principles have to be applied to ensure the confidentiality of the patients, the safety of the research subjects (human and animals), differentiation between ethical and legal issues, as well as the understanding of the principles that deal with authorships, intellectual property in the academic- and industry- based environment.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/PEDIAT 705 – WOMEN AND LEADERSHIP: SCIENCE, HEALTH AND ENGINEERING**

2 credits.

Multiple professional and scientific groups have identified the underrepresentation and lack of advancement of women in academia as a national workforce problem. Review evolving perspectives of leadership and how unconscious assumptions about the behaviors and traits of men, women, and leaders impede women's advancement. Emphasizes the implications for women in the fields of science, health and engineering and explore the potential impact on the advancement of knowledge and improvements in health. Provides the opportunity to apply evidence-based perspectives using experiential methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/B M E 710 – ADVANCES IN MEDICAL MAGNETIC RESONANCE**

3 credits.

Addresses the theory and applications of magnetic resonance (MR) in medicine, by providing the necessary theoretical background to understand advanced MR techniques including magnetic resonance imaging (MRI).

**Requisites:** B M E/MED PHYS/B M E 568

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED PHYS/B M E/CHEM 750 – BIOLOGICAL OPTICAL MICROSCOPY**

3 credits.

Covers several aspects of state-of-the-art biological and biophysical imaging with an emphasis on instrumentation, beginning with an overview of geometrical optics and optical and fluorescence microscopy. The bulk of the course will focus on advanced imaging techniques including nonlinear optical processes (multi-photon excitation, second harmonic generation, and stimulated Raman processes) and emerging super-resolution methods. Special emphasis will be given to current imaging literature and experimental design. Knowledge of physics-based optics [such as PHYSICS 202] strongly recommended.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**MED PHYS 770 – ADVANCED BRACHYTHERAPY PHYSICS**

3 credits.

The use of radioactive sources for radiotherapy including: materials used, source construction dosimetry theory and practical application, dosimetric systems, localization and reconstruction. Covers low dose rate, high dose rate and permanently placed applications.

**Requisites:** B M E/MED PHYS/B M E 566**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**MED PHYS 772 – ADVANCED RADIATION TREATMENT PLANNING**

3 credits.

Physics of clinical, computer-based radiotherapy planning is taught. Topics include dose algorithms, measurement data, commissioning, contouring and volume definition, beam placement, modifiers and apertures and plan evaluation. Forward based and inverse planning (including IMRT optimization) are taught.

**Requisites:** B M E/MED PHYS/B M E 566 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MED PHYS 775 – ADVANCED ULTRASOUND PHYSICS**

3 credits.

Foundations of acoustic wave equations, diffraction phenomena and acoustic beam formation, models for acoustic scattering from discrete structures and inhomogeneous continua, speckle statistics including speckle correlation, applications of these topics in medical imaging.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2013**MED PHYS 777 – PRINCIPLES OF X-RAY COMPUTED TOMOGRAPHY**

3 credits.

Understand the basic principles of x-ray computed tomography (CT), and how to think when a technical problem arises in CT. Accomplished through a review of the history of CT developments and key components of CT systems, lectures on various CT reconstruction algorithms, image quality, and radiation dose, origin and correction methods of various CT artifacts.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MED PHYS/B M E/E C E 778 – MACHINE LEARNING IN ULTRASOUND IMAGING**

3 credits.

Concepts and machine learning techniques for ultrasound beamforming for image formation and reconstruction to image analysis and interpretation will be presented. Key machine learning and deep learning concepts applied to beamforming, compressed sampling, speckle reduction, segmentation, photoacoustics, and elasticity imaging will be evaluated utilizing current peer-reviewed publications.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MED PHYS 780 – PHARMACOKINETIC MODELING IN BIOMEDICAL IMAGING**

2 credits.

Concepts and techniques of pharmacokinetic modeling will be presented in the context of biomedical imaging. Examine applications in various specialties, e.g. neurology and oncology, using different imaging tools, e.g. positron emission tomography (PET) and magnetic resonance imaging (MRI).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**MED PHYS 900 – JOURNAL CLUB AND SEMINAR**

1 credit.

Provides medical physics graduate students with the opportunity to critically evaluate and report on published research and/or research seminar presentations by speakers, from both within the university and from the larger scientific community.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MED PHYS 990 – RESEARCH**

1-12 credits.

Provides graduate students with mentorship to support their development of independent research goals and methods needed to address specific scientific problems that will result in a comprehensive dissertation.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

# MEDICAL SCIENCES – MEDICAL SCHOOL (MED SC-M)

## MED SC-M 722 – CLINICAL ANATOMY AND RADIOLOGY

2-4 credits.

Study of the anatomy of the head and neck, body wall, body cavities, limbs, and pelvic outlet through complete dissection of human cadavers. Hands-on experience in interpreting radiological cross-sectional images. Surgical correlates will be presented by practicing surgeons.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## MED SC-M 723 – INDEPENDENT ADVANCED ANATOMY DISSECTION

2 credits.

Complete dissection and advanced study of the anatomy, histology, embryology, and neuroanatomy of a specific anatomical region as defined by student-generated learning objectives.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

## MED SC-M 733 – COMPLEMENTARY MEDICINE: IMPLICATIONS FOR CLINICAL PRACTICE

1 credit.

Covers the fundamentals of psychoneuroimmunology; meditation; traditional chinese medicine; botanical medicine; ayurveda; homeopathy; massage, therapeutic touch and reiki; chiropractic, osteopathic and cranial sacral therapy; art therapy; integration of complementary medicine into a mainstream practice.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

## MED SC-M 735 – MEDICAL SPANISH FOR HEALTH SCIENCE STUDENTS

1 credit.

Medical interviewing, physical examination and cultural competency skills to enhance their ability to provide care for Spanish-speaking patients and their families. Pertinent medical vocabulary for clinical histories and physical exams, and grammar components to facilitate effective and professional communication. For health science students with intermediate or advanced Spanish proficiency.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## MED SC-M 740 – OVERVIEW OF RURAL HEALTH

1 credit.

Designed to introduce students in Phase 1 of the ForWard Curriculum to the rural community, its people, the health care issues they face, and the practice of medicine in rural communities. Key concepts of rural medicine, including health resources, access to care, injuries and illnesses associated with farming and agri-business, safety and protective equipment, and health policies. Preparation for clinical training and work in rural areas of Wisconsin.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## MED SC-M 747 – PERSUASION: THE ART OF EFFECTIVELY CONVEYING HEALTH INFORMATION

1 credit.

Effective communication is a critical tool for health advocacy. Learn how to write and present clear, engaging, and visually striking slides conveying medical information. Become more comfortable with speaking about health sciences topics, whether your listeners are professional colleagues or general audiences. Learn how to facilitate health discussions in a manner which is valuable for all participants. Course combines discussion and presentations with opportunities to practice and receive feedback from their colleagues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

## MED SC-M/LAW/NURSING 768 – CONSUMER HEALTH ADVOCACY AND PATIENT-CENTERED CARE CLINICAL

1-7 credits.

Interdisciplinary health advocacy clinical supervised by diverse professional staff. Provide broad advocacy to patients with life-threatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-M 770 – PATIENTS, PROFESSIONALISM AND PUBLIC HEALTH**

4 credits.

Introduction to concepts of health and disease, which vary from patient to patient and through time. View health from a population standpoint, with an introduction to basic public health concepts as well as how physicians may positively impact both individual and population level health. Woven within that framework are introductions to key aspects of professionalism, patient-centered history- taking, and core communication skills.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-M 771 – BODY IN BALANCE**

11 credits.

Organized around physiological themes, the course includes material related to the cardiovascular system, hematology, nephrology, and pulmonology to present an integrated picture of how these systems function together to maintain homeostasis. In addition, there is significant content from other competency domains such as public health, ethics, evidence-based medicine, patient care/communication and clinical skills.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-M 772 – FOOD, FASTING & FITNESS**

9 credits.

Organized around biomedical themes including nutrients, the digestive system, the biochemistry and endocrine control of metabolism, exercise and fitness and the removal of waste products and toxins to present an integrated picture of how these systems function together to maintain homeostasis. Integrates developmental content from competency domains, or "longitudinal threads", including communication, patient care, ethics, health information technology, public health, professionalism, quality improvement, patient safety, and scientific inquiry.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-M 773 – HUMAN FAMILY TREE**

8 credits.

Focuses on molecular, genetic, embryologic, hormonal, anatomical and physiological factors that govern fertility, cell growth, fetal development, and pregnancy as well as the congenital anomalies that can occur when those processes are aberrant. Encompasses the full life-cycle spectrum including childhood growth and development, young adulthood/puberty, issues affecting adolescents and young adults, genetic basis of human disease, reproductive health, menopause, aging, unregulated cell growth (cancer) and end of life issues. Significant content from other competency domains, or "longitudinal threads", such as public health, advocacy, ethics, patient care/communication and clinical skills.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-M 774 – INVADERS AND DEFENSE**

9 credits.

Integrated examination of how the immune system interacts with foreign microbes, the normal micro biome, and self tissues, both normal and malignant. Examines inflammation and the impacts of this type of response on normal cells, in wound healing, infectious disease, and inflammatory diseases including autoimmune disease and dermatologic conditions, including neoplasia of the skin. Covers the development of adaptive immune responses from vaccination, infectious processes, and organ transplantation. Covers the basic biology and pathophysiology of "invaders" of the human body, including viruses, fungi, and bacteria, along with their clinical diagnosis and therapy. Addresses malignant transformation of the immune effector cells themselves, including cancers of mature lymphoid cells and bone marrow derived malignancies.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-M 775 – MIND & MOTION**

10 credits.

Introduction to core basic science, pathophysiologic, and diagnostic principles requisite for the care and treatment of patients with musculoskeletal, neurologic, and psychiatric presentations and disorders. Basic science concepts include those from the traditional disciplines of cell biology, histology, biochemistry, anatomy, embryology, neuroscience, and behavioral science. Regular integration of these topics with their pathologic and pathophysiologic counterparts. Integration of content related to other competency domains, or "longitudinal threads", that include patient care communication, evidence based medicine, health information technology, quality improvement patient safety, professionalism, scientific inquiry and public health.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-M 810 – CARE ACROSS THE LIFE CYCLE**

12 credits.

Promotes development of clinical knowledge and skills necessary to care for patients and populations across the lifespan. Gain practical experience in a variety of inpatient and outpatient settings including pediatrics, obstetrics and geriatrics. Regular integration of clinical topics with the relevant physiology and pathophysiology and other basic science components. Integration of content related to other competency domains, or "longitudinal threads", that include patient care communication, evidence based medicine, health information technology, quality improvement patient safety, professionalism, scientific inquiry and public health.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 811 – CHRONIC AND PREVENTIVE CARE**

12 credits.

Identify the roles of physicians, interdisciplinary providers, health care systems, and communities in screening, treating, and preventing common, chronic conditions. Activities are centered on health promotion, outpatient-based chronic disease management, and community health. Clinical experiences will occur in primary care, behavioral health, and other ambulatory and community-based settings that focus on chronic disease management.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 812 – ACUTE CARE**

12 credits.

Focus on assessing patients with urgent medical conditions, providing acute inpatient care, and transitioning patients to other care settings or home under the care of other professionals. Provide acute care in inpatient and outpatient urgent care settings as well as on the inpatient wards, and develop acute management plans and subsequent transition of care plans. Clinical experiences in acute care settings such as the emergency department and inpatient medicine (both general and subspecialty), psychiatry, and neurology. Builds upon fundamental science concepts introduced in Body in Balance and Mind and Motion, including Ohm's Law, acid-base balance, and volume regulation. Organ system-based approach employing varied modalities. Complete an integrated patient-centered experience by participating in the care of a patient from an urgent admission through inpatient treatment and discharge.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 813 – SURGICAL AND PROCEDURAL CARE**

12 credits.

Care of adults and children undergoing an operation or procedure, including perioperative preparation, operative care, and post-operative cares for core clinical conditions in the specialties of anesthesia, neurosurgery, ophthalmology, general surgery, otolaryngology, urology, cardiothoracic surgery, peripheral vascular surgery, orthopedics, plastic and reconstructive surgery, and gynecology, as well as interventional radiology, procedural cardiology and gastroenterology. Basic science concepts include cerebral spinal fluid production and flow, fluids and electrolytes, consciousness, inflammation and wound healing, and cancer biology. Anatomic approach using case discussions, podcasts, curated independent reading, online nationally supported modules, and simulation skills. Longitudinal patient care experience integrating communication, evidence based medicine, health information technology, quality improvement patient safety, professionalism, scientific inquiry, and public health.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 850 – INTRODUCTION TO HEALTHCARE SIMULATION**

3 credits.

Learn the history and best practices of healthcare simulation. Gain global perspective on simulation terminology and best practices in simulation facilitation to advance safe, high-quality, patient-centered care.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 3 number of completions**MED SC-M 851 – INSTRUCTIONAL DESIGN IN SIMULATION**

3 credits.

In-depth curriculum development and instructional design of a simulation activity. Practice conducting a thorough needs assessment. Develop clearly defined goals and objectives in determining best educational strategies as they relate to healthcare simulation.

**Requisites:** MED SC-M 850 or concurrent enrollment**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions**MED SC-M 852 – SIMULATION FACILITATION**

3 credits.

Best-practices in simulation facilitation, including crucial components such as prebriefing, skills-based education, immersive experiences, debriefing, learner evaluation and curriculum assessment.

**Requisites:** MED SC-M 850 or concurrent enrollment**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 2 number of completions

**MED SC-M 853 – DEBRIEFING IN HEALTHCARE SIMULATION**

3 credits.

Continued development in health care simulation methodology. Best practices in debriefing both procedural and immersive simulation scenarios.

**Requisites:** MED SC-M 850 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**MED SC-M 902 – AMBULATORY ACTING INTERNSHIP**

4 credits.

Designed for students to assume primary responsibility of patients in the outpatient setting. Work with direct oversight by a faculty attending physician as you interview and examine patients, decide upon accurate diagnoses and formulate an appropriate treatment plan. Offered among various specialties and across the statewide campus. A primary focus of this rotation is medical decision-making regarding the ordering of tests and labs, medications and other therapeutic interventions. Students are expected to demonstrate effective communication with patients.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-M 909 – INTERNSHIP PREP COURSE**

3 credits.

Designed for students to apply the knowledge and skills developed over four years of medical school and prepare them for the transition from medical student to intern. The course will cover topics in the following domains: Common and Critical Medical Conditions, Laboratory Interpretation and Procedural Skills, Professionalism and Communication, Hospital and Team Functioning and Life Skills. Sessions will include core topics for all students and sessions for those who will pursue medical or surgical specialties.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**MED SC-M 910 – MEDIC CLINICS SELECTIVE: A STUDY OF MARGINALIZED POPULATIONS AND INTERPROFESSIONAL COLLABORATION**

2 credits.

Provides a two-pronged opportunity for fourth year medical students to re-engage with MEDiC clinics where they may have volunteered during their first and second years of medical school, further appreciating the complexities of serving marginalized populations, and to use their recent clinical experience to contribute as both mentors and collaborators with students from multiple health professional professions. Careful focus on the broad public health issues affecting the patients in MEDiC clinics and how these issues inform their health status, health care and health access. Investigate the role of race in health disparities, as well as the role of socio-economic status.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-M 911 – RACIAL HEALTH DISPARITIES IN WISCONSIN**

2 credits.

Uses Wisconsin health disparities data as a tool to address the broader misconceptions about race, biology, and health. Includes an overview of the genetic mechanisms for species variation, human evolutionary history, human adaptation and clinical patterns, and misconceptions about the biological underpinnings of race and health outcomes with an emphasis on the social and environmental determinants of health.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MED SC-M 912 – TEACHING IN THE CLASSROOM: LABORATORY-BASED LEARNING IN MEDICAL EDUCATION**

2-4 credits.

Advanced course for medical students interested in teaching, pursuing careers in academic medicine and/or preparing to teach in residency. Develop knowledge and skills in the theory and practice of teaching and learning in laboratory-based environments such as the clinical teaching and assessment center (CTAC) and anatomy lab. Enhance and apply your skills with hands-on experiences observing and teaching classroom-based clinical skills and anatomy.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MED SC-M 913 – WISCONSIN ACADEMY FOR RURAL MEDICINE (WARM) INTERNSHIP PREPARATION ELECTIVE**

1 credit.

Review and reinforce baseline skills you will need for internship training in any specialty, using interactive learning methods. Major topics include Radiology, Cardiology/Pulmonary, Urgent and Emergent situations, Procedural skills, Acute Illness, and Communication.

**Requisites:** MED SCI-M 810, 811, 812 and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 914 – TEACHING IN THE CLASSROOM: CASE-BASED LEARNING IN MEDICAL EDUCATION**

2-4 credits.

Advanced learning for those interested in teaching, pursuing careers in academic medicine and/or preparation for teaching in residency. Develop knowledge and skills in the theory and practice of teaching and learning specific to design, implementation and facilitation of case-based learning. Enhance and apply your skills with hands-on experiences observing and teaching in classroom-based sessions. Teaching opportunities include facilitating Patient Centered Education (PaCE), Integrated Radiology, Anatomy, and Histology (iRAH), simulation, medium/small group case-based learning and large group team-based learning.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MED SC-M 918 – INDEPENDENT READING AND RESEARCH IN MEDICAL SCIENCES**

2-8 credits.

Independent research studies under the direct supervision of SMPH faculty. Each project is individualized to meet student learning objectives.

**Requisites:** Declared in Medicine program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MED SC-M 930 – AMERICAN INDIAN HEALTH, HISTORY & TRIBAL GOVERNANCE**

1 credit.

An inter-professional introduction on foundational knowledge regarding the history, structures and key health priorities of Wisconsin tribal nations delivered by a wide range of faculty and guest experts.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-M 940 – ADVOCATING FOR PATIENTS: GETTING THE RIGHT CARE AT THE RIGHT TIME**

2 credits.

Introduction to some of the core features of the U.S. Health Care System, as experienced by patients and the health care providers caring for them. Build your capacity for advocacy in clinical settings by exploring frameworks and strategies for addressing barriers and inequities, and communication tools to help patients and families better navigate complex systems and access community resources. Advocacy content concentrated on personal advocacy interests.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**MED SC-M 941 – ADVOCATING FOR POPULATIONS: PARTNERING TO IMPROVE COMMUNITY HEALTH**

2 credits.

Introduction to advocacy for population health. Covers determinants of health and the systemic causes that specific populations experience with health and health care in the U.S. Explore a range of strategies and tools for creating productive change with, and on behalf of, groups of patients. Strengthen the ability to see connections between the experiences of individual patients and providers and the organizational, political, social, and economic structures that influence the experiences of all health care stakeholders.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No

## MEDICAL SCIENCES - VETERINARY MEDICINE (MED SC-V)

**MED SC-V 570 – ANIMAL HEALTH HISTORY RESTRAINT AND PHYSICAL EXAMINATION**

1 credit.

Introduces use of the problem oriented medical record concepts, history taking, physical examination and basic restraint, and diagnostic and therapeutic techniques in large and small domestic animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**MED SC-V 576 – SMALL ANIMAL EMERGENCY AND CRITICAL CARE I**

1 credit.

Introduction to various topics of emergency and critical care medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine**Repeatable for Credit:** No**Last Taught:** Spring 2023



**MED SC-V 577 – SMALL ANIMAL EMERGENCY AND CRITICAL CARE II**

1 credit.

Cover various topics in emergency and critical care medicine. Several areas of emergency and critical care medicine will be presented.

**Requisites:** MED SC-V 576

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-V 625 – VETERINARY DIAGNOSTIC AND THERAPEUTIC TECHNIQUES**

0-1 credits.

Formal laboratory instruction. Detailed examination techniques and diagnostic and therapeutic procedures relevant to veterinary procedures on all species of domestic animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-V 629 – VETERINARY NUTRITION**

1 credit.

Presents awareness of the importance of nutrition in the veterinary practice.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-V 632 – COMPANION ANIMAL AND EQUINE MEDICINE I**

6 credits.

Basic concepts of well-animal companion animal and equine health care, nutrition, and reproduction will be presented. Discussion of the etiology, pathophysiology, diagnosis, treatment, and prevention of important internal medicine and reproductive diseases in these species will be emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-V 633 – COMPANION ANIMAL AND EQUINE MEDICINE II**

6 credits.

Basic concepts of well-animal companion animal and equine health care, nutrition, and reproduction will be presented. Discussion of the etiology, pathophysiology, diagnosis, treatment, and prevention of important internal medicine and reproductive diseases in these species will be emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-V 634 – FOOD ANIMAL MEDICINE**

5 credits.

Basic principles for food animal species. Integrates food animal medicine, theriogenology, nutrition and preventive medicine concepts.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-V 635 – SWINE MEDICINE**

1 credit.

Focuses on basic swine medicine clinical skills including diagnosis and treatment of common swine diseases that present in individual pigs and populations. Influences of production practices and farm structure will be introduced as they impact the successful practice of swine medicine. Additionally, regulatory influences unique to swine veterinary medicine and principles of biosecurity/biocontainment and bioexclusion will be discussed.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-V 667 – SMALL ANIMAL NEUROLOGY**

2 credits.

Provide instruction and guidance in obtaining a complete neurological history, interpreting examinations, diagnostic tests and rationally selecting an appropriate diagnosis and effective management for neurology cases.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 668 – CLINICAL DERMATOLOGY ROTATION**

2 credits.

Develop the technical, clinical and knowledge skills to effectively examine, diagnose and manage the dermatology patient.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 669 – SMALL ANIMAL CARDIOLOGY ROTATION**

2 credits.

Diagnostic techniques and therapy available for the management of cardiology patients.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 670 – SENIOR ROTATION IN LARGE ANIMAL MEDICINE SERVICE**

2 credits.

Diagnosis and medical treatment of diseases of horses, cattle, sheep, goats and pigs. Examine, admit and discharge cases in the Veterinary Medical Teaching Hospital.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 674 – SENIOR ROTATION IN AMBULATORY SERVICE**

2 credits.

Diagnosis, treatment, and recommendation of preventive measures for common medical, surgical and management problems on farms. Examine the environmental influences associated with such problems.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 675 – SPECIAL TOPICS**

1-5 credits.

Topics vary.

**Requisites:** Declared in Doctor of Veterinary Medicine

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 678 – SMALL ANIMAL INTERNAL MEDICINE**

2 credits.

Develop the ability to analyze, organize and integrate information effectively to make clinical decisions relating to the diagnosis, prognosis, management and control of diseases.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 679 – SMALL ANIMAL ONCOLOGY**

2 credits.

To develop skills in clinical medicine, palpation, interpretation of laboratory data and become acquainted with oncology clientele.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 699 – DIRECTED STUDY**

1-5 credits.

Projects in the laboratory and/or through library work in specific subject areas under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MED SC-V 701 – PRODUCTION MEDICINE I**

2 credits.

Visit dairy farms, learn to identify production limiting problems, and develop a priority list based upon economic importance. The farm investigation consists of visual evaluations of farmstead and herd, interpretation of DHI records, and computer analysis of herd records.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MED SC-V 703 – PRODUCTION MEDICINE II**

2 credits.

Investigate and analyze farm and laboratory data and evaluate recommendations using benefit/cost analyses. Perform milking system, milking procedure, and environmental management evaluations.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MED SC-V 705 – PRODUCTION MEDICINE III-APPLIED DAIRY NUTRITION**

2 credits.

Rotation for applying principles of nutrition to dairy practice.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MED SC-V 710 – SMALL ANIMAL EMERGENCY MEDICINE ROTATION**

2 credits.

Work jointly with faculty, residents and interns to assess emergent patients, formulate both treatment and diagnostic plans. Under direct supervision, demonstrate basic ER skills and procedures upon patients, as is appropriate.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**MED SC-V 714 – SMALL ANIMAL PRIMARY CARE ROTATION**

2 credits.

Provide a practical, clinical experience by determining the diagnosis and treatment of general practice preventative medicine and diseases of dogs and cats. Provide an opportunity to evaluate and treat primary or first opinion cases (medicine, surgery) seen in private practice, to develop proficiency in client communications, and to create a skills base for management of preventive health, new pet and primary medical and surgical cases.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**MED SC-V 716 – SMALL ANIMAL WISCARES ROTATION**

2 credits.

Lead cases by determining diagnosis and treatment of general practice preventative medicine and diseases of small animal species. Build clinical diagnostic and surgical skills, communication skills, interdisciplinary teamwork, self-reflection, and cultural humility skills.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

**MED SC-V 775 – EXTERNSHIP**

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MEDICINE (MEDICINE)****MEDICINE 699 – INDEPENDENT STUDY**

0-5 credits.

Self-directed work under the supervision and guidance of an Instructor and often in conjunction with a day-to-day mentor that is a graduate student, postdoc researcher or directly with the faculty. Students normally participate in aspects of ongoing research projects.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MEDICINE/CRB 701 – CELL SIGNALING AND HUMAN DISEASE**

1 credit.

Landmark discoveries, as well as current knowledge and controversies in human health, with an emphasis on cancer biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE/NURSING/POP HLTH 705 – SEMINAR IN INTERDISCIPLINARY CLINICAL RESEARCH EVIDENCE**

2 credits.

Exploration of interdisciplinary clinical research questions including strategies for assessing the evidence and conducting a systematic review of research. An interdisciplinary perspective is emphasized throughout the course.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and BMI/STAT/B M I 542

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**MEDICINE 710 – IMPROVISATIONAL THEATRE FOR SCIENTISTS**

1 credit.

Improvisers are experts in storytelling, spontaneity, and using observation skills to adjust to their audiences and team members accordingly. Among other skills, this 5-week course will teach you how to (1) effectively communicate your work to different audiences, (2) adjust your behavior in real time to respond to audience feedback, and (3) manipulate your vocal and physical presence to communicate more effectively.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 720 – ENDOCRINOLOGY AND METABOLISM**

3 credits.

Provides a broad grounding in endocrinology and metabolism with an emphasis on human and human-related disorders wherever possible. Explores further the physiological and molecular mechanisms by which the endocrine regulation of metabolism acts to preserve mammalian health, and how dysfunction in these mechanisms leads to disease, with an emphasis on diabetes, obesity and hypertension.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 750 – CAPSTONE PROJECT IN CLINICAL AND HEALTH INFORMATICS**

3 credits.

Collective application of all other Clinical and Health Informatics graduate degree coursework. Addresses all ten American Medical Informatics Association (AMIA) competencies through a summative project to demonstrate the knowledge, skills, and attributes necessary for successfully working in health care informatics.

**Requisites:** Declared in Clinical and Health Informatics MS program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 809 – INTERSECTION OF HEALTH CARE AND INCARCERATION**

1 credit.

With an ever growing and aging prison population, the need for adequate healthcare for incarcerated individuals is rising. Focuses on common healthcare concerns of incarcerated individuals. Topics covered include, infection control, addiction and mental health, conducting research within correctional facilities, and how to continue care for chronic conditions after release.

**Requisites:** MED SC-M 810, 811, 812, and 813; or declared in Nursing or Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 880 – THE BODY ELECTRIC: INTERSECTION OF CELLULAR ELECTROPHYSIOLOGY WITH CLINICAL ELECTROCARDIOGRAPHY**

2 credits.

Mapping of cellular and conduction perturbations to observed changes on the surface ECG recording for inherited arrhythmia syndromes (e.g., long QT syndrome, Brugada syndrome), drug toxicities (Class IC and III antiarrhythmics, digoxin excess), cardiac arrest, electrolyte disturbances, and metabolic disturbances; Selection of appropriate therapies, including antiarrhythmics and device therapies, and how they affect cardiac electrophysiology and the clinical ECG.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 902 – CLINICAL & TRANSLATIONAL RESEARCH ELECTIVE**

2-6 credits.

Unique opportunity for fourth year medical students in the PhD program to integrate clinical work with a clinical or translational research project, thus providing early exposure and hands-on experience with clinically-oriented research and the integrated career of a physician-scientist in the students' chosen clinical specialty. Course components construct the experience of six weeks in the life of a practicing physician-scientist, balancing clinical practice, research on a project relevant to community public health, study design, manuscript preparation, regulatory meetings, and public outreach - all under the guidance of a dedicated physician-scientist mentor. Intended for MSTP students in Phase 3 of ForWard curriculum

**Requisites:** Declared in Doctor of Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**MEDICINE 903 – MSTP LONGITUDINAL CLINICAL CLERKSHIP IN GRADUATE SCHOOL**

1-12 credits.

This is a required clinical elective for MSTP students during their graduate years. During PhD training, all students are required to participate in a scholarly continuity clinical experience in their fields of interest. Each student will complete and certify 10 half-day sessions or equivalent with an academic clinical mentor and present in the MSTP seminar.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MEDICINE 905 – THE APPLIED PHYSIOLOGY OF MECHANICAL VENTILATION**

2 credits.

Focus on the intersection between the physiology of the respiratory system and the mechanical engineering of ventilators, with particular attention to patient-ventilator interactions. Investigate the important physiologic trade-offs inherent in various strategies of mechanical ventilation. Apply these principles to patients with and without underlying pulmonary disease. Finally, evaluate a landmark study on tidal volume in ARDS, with particular attention to the scientific and ethical controversies that surround the trial. This course involves a modicum of physics and math.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MEDICINE 906 – ACE ACUTE CARE FOR ELDERLY CONSULTATION SERVICES ELECTIVE**

2 credits.

Working directly as part of the inpatient consult team at the UW Hospital, an opportunity to practice and improve inpatient care skills for hospitalized elders. Learn to use basic assessment tools to diagnose and care for patients with common geriatric syndromes, such as delirium, cognitive impairment, depression, and falls. Learn to use prescription techniques better suitable for elderly patients, expand understanding of how medical decision-making capacity is assessed, and adopt multi-disciplinary strategies to manage patients' long-term care goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MEDICINE 907 – INPATIENT ENDOCRINOLOGY/DIABETES CONSULTS ELECTIVE**

2 credits.

Involves patient care in the hospital, working in the role of a consultant. Improve knowledge and inpatient care management skills of common endocrine conditions, diabetes and thyroid disorders. Discusses other, less common, endocrinopathies as they present, including pituitary, adrenal and thyroid disorders.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MEDICINE 908 – MY STORY:TECHNIQUES FOR INTERVIEWING PATIENTS**

2 credits.

Teaches students My Life, My Story interviewing and writing techniques. My Life, My Story is a novel healthcare intervention developed at the Madison VA hospital. Program staff and trained community volunteer interview Veterans about their life stories and write up a short story based on the interview. These stories are then reviewed by the veteran and (with veteran approval) added to the VA medical record to be shared with the veteran's inpatient and primary care teams. The veteran also receives printed copies of the story for his/her family. The goal of the project is to foster a closer connection between VA providers and Veterans in their care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MEDICINE 909 – INFECTIOUS DISEASE TRANSPLANT SERVICE ELECTIVE**

2 credits.

Infectious disease management skills with a focus on transplant patients. Interaction occurs on the inpatient infectious disease transplant consult service at UW Hospital. In addition to extensive knowledge of infectious diseases in transplant patients, there is also an emphasis on major toxicities and drug interactions between antimicrobial agents, understanding the "net state of immunosuppression," and honing skills as a consultant in the hospital.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MEDICINE 910 – PHASE 3 INDEPENDENT READING AND RESEARCH IN MEDICINE**

2-8 credits.

Independent research under the direct supervision of Medicine faculty. Each student's research project is individualized to meet student research goals within the context of faculty research needs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MEDICINE 912 – TRANSPLANTATION, IMMUNOLOGY AND NEPHROLOGY ELECTIVE**

2-4 credits.

Evaluate and treat patients on inpatient and outpatient transplant nephrology services. Common conditions include evaluation of transplant patients with AKI and immunology related problems. Learn the basic principles of immunosuppressant management and rejection management. Review biopsies daily with a pathologist and attend surgical transplant Grand Rounds.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MEDICINE 913 – BASIC SCIENCE FOUNDATIONS OF CLINICAL THERAPEUTICS**

2 credits.

Unique opportunity for Phase 3 medical students to combine underlying basic sciences with clinical therapies. Explore state-of-the-art molecular biology, physiology, pathophysiology and pharmacology underlying many common diseases. Practice applying this knowledge to better understand clinical interventions for these diseases that are seen commonly in residency. Topics will include Alzheimer's disease, atrial fibrillation, hypertension, rheumatoid arthritis, opioids, stroke, and more.

**Requisites:** MED SCI-M 810, 811, 812, and 813. Not open to students who have credits for MEDICINE 915

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDICINE 916 – PALLIATIVE CARE ELECTIVE**

2 credits.

Participating with the care of patients in the Palliative Care Unit, on the Palliative Care Consult Service, and through home visits or outpatient care opportunities, experience and understanding will be gained of fundamental palliative care concepts. Management of common symptoms, such as pain, dyspnea, and anxiety, while practicing and improving specific communication skills, such as delivering bad news, determining goals of care, or running a family meeting. Expand understanding of goals of care and decision-making for patients with serious illness, DNR orders, medical decision-making capacity, surrogate-decision-making, care of the patient at end of life, as well as psychosocial issues related to loss, grief, and bereavement.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 917 – SMOKING CESSATION: PUTTING EVIDENCE INTO PRACTICE ELECTIVE**

2 credits.

Training in use of evidence-based smoking cessation treatments and application of smoking cessation research in order to be able to interpret such evidence throughout your career. A special emphasis will be placed on working with underserved and specific subgroups of smokers (e.g., low-income, racial minorities, mental health status) through specific treatment plans, pharmacotherapy, counseling, including motivational interviewing, and community-based interventions such as quit lines. We will also look at how to use health systems, such as electronic health records in conducting community-participatory research in subpopulations of smokers.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MEDICINE/B M I 918 – HEALTH INFORMATICS FOR MEDICAL STUDENTS ELECTIVE**

2 credits.

Biomedical Informatics is an interdisciplinary field that combines knowledge of information sciences and medical sciences to optimize the use and application of biomedical data across the spectrum from molecules to individuals to populations. Offers an overview of the field of health informatics by providing students with the fundamental knowledge of the concepts of health informatics and how technology can be used in the delivery of health care.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 919 – INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN MEDICINE**

2-4 credits.

Care for hospitalized patients on general medicine or hospital medicine services. Admit new patients, round on previously admitted patients, participate in multidisciplinary rounds, and work to transition patients to the next level of care. Evaluate and manage both patients with common inpatient conditions and medically complex patients requiring collaboration with consulting specialties. Complete other patient care related learning activities as assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, attending physician, and clinical site.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 921 – AMBULATORY MEDICINE ELECTIVE-STUDENT HEALTH**

2-4 credits.

Learn to care for young adults with general medicine problems on the university campus during the academic year. Participate in history taking, diagnosis and treatment plans for patients. Direct supervision by house staff and attending physicians. Attend regularly scheduled supervisor-student meetings, which involve some or all of the following: participating in scheduled procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions, completing problem sets, and preparing for direct patient care as needed. Complete other patient care related learning activities as assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MEDICINE 922 – AMBULATORY GENERAL INTERNAL MEDICINE ADVANCED ELECTIVE**

2-4 credits.

Focuses on fundamental aspects of adult patient health important to all physicians in internal medicine. Work with academic faculty in adult patient health in the ambulatory setting to refine clinical knowledge and skills essential for providing excellent health care. Will have the opportunity to provide supervised preventative care to adults of all ages, and includes common diseases such as asthma, migraine headache, dyslipidemia, diabetes mellitus, musculoskeletal concerns and heart disease.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**MEDICINE 930 – WOMEN'S HEALTH IN PRIMARY CARE ELECTIVE**

2-4 credits.

Focuses on fundamental aspects of women's health important to all physicians in internal medicine. Work with academic faculty in women's health in the ambulatory setting to refine clinical knowledge and skills essential for providing excellent health care to women. Will have the opportunity to provide supervised preventative care to women of all ages, and includes common diseases such as asthma, migraine headache, dyslipidemia, diabetes mellitus, and heart disease – many have manifestations, risk factors or interventions which are different in women.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**MEDICINE 932 – BIOLOGY OF AGING AND AGE-RELATED DISEASES**

2 credits.

Examine the biology of aging and related clinical aspects in geriatric care. Designed for medical students interested in understanding the biology of aging and how it relates to translational biomedical and clinical research as well as clinical practice. Aging and age-related diseases are examined via the combined expertise of basic scientists and clinicians in blocks of two lectures. Case studies and clinical research study design workshops provide the means to integrate didactic content in real world application. Additional materials include video vignettes focused on aging biology and on pharmacological interventions for the most common geriatric conditions.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MEDICINE 933 – GERIATRIC ELECTIVE**

2-4 credits.

Exposure to patients in outpatient clinic and on the inpatient consult service. Other exposure to patients may occur in a nursing home setting. Learn diagnostic tools to assess elders for common geriatric syndromes including cognitive impairment, depression, and falls. Gain knowledge to recognize and address poly-pharmacy, learn prescribing techniques that are appropriate for the patient's age, and recommend age-appropriate treatment plans. Active role on the inpatient consult team focusing on the care of hospitalized elders.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 935 – HEMATOLOGY/ONCOLOGY ELECTIVE**

2-4 credits.

Exposure to patients in outpatient hematology and oncology clinics and on the inpatient consultation service. Oncology-focused rotation topics include staging and prognosis of different malignancies, basics of chemotherapy classes, and indications for chemotherapy. Hematology content includes the diagnostic approach to clotting disorders, anemia, and/or abnormal blood counts. Different chemotherapy treatments for hematologic malignancy may be included in this course. Independent reading is expected; didactic conferences are site-specific.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 938 – INPATIENT ACTING INTERNSHIP-INTERNAL MEDICINE**

4 credits.

As an inpatient medicine acting intern (AI), you will have primary responsibility for patients actionable in four domains: 1. Management: As an AI, you will develop actionable management and treatment plans based on your history, physical exam and targeted data. 2. Communication: AIs will communicate with colleagues, primary care providers and consultants. AIs will demonstrate thorough patient hand-offs and write concise discharge summaries that will be integral to patient care. 3. Learning: Patient care issues will be the central guide for learning, directing reading, consultation and research. AIs will formulate questions based upon clinical dilemmas, research the appropriate literature and databases to find the answers, and apply findings to the care of individual patients. 4. Organization: As the primary inpatient provider for patients, AIs will develop efficiency in accomplishing the day to day tasks necessary for the coordination and management of patient care.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MEDICINE 939 – INPATIENT-OUTPATIENT ALCOHOL-DRUG ABUSE ELECTIVE**

2-4 credits.

Develop necessary problem solving skills and knowledge to safely and efficiently evaluate and manage patient with associate medical and psychiatric complications of AODA (Alcohol and Other Drug Abuse). Learn signs/symptoms, test findings in the common AODA syndromes include drug withdrawal and acute/chronic intoxication. Design plan of evaluation to efficiently and safely diagnose each of the above disorders in a patient or a pt case study. Supervised by house staff and attending physicians. Regular supervisor-student meetings, involving some or all of the following: eval patients, participate in scheduled procedures, present cases and teach topics, and discuss patient cases. Complete independent work including some or all of the following: readings, completing problem sets, and preparing for direct patient care as needed. Complete other pt care related activities as assigned (e.g., lit reviews, presentations), dependent on individual student, attending, and clinical site.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**MEDICINE 940 – ALLERGY AND CLINICAL IMMUNOLOGY ELECTIVE**

2-4 credits.

Exposure to patients in an outpatient clinic setting with an attending physician and staff, to learn how to address common allergic disorders, such as allergic rhinitis, asthma, urticaria, drug and insect allergy. Focuses on skills in allergy-related history-taking, procedures used in the evaluation of allergy, and the importance of patient education and preventive management of allergic conditions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 942 – CLINICAL ELECTROPHYSIOLOGY ELECTIVE**

4 credits.

Develop skills in basic electrocardiogram (EKG) and arrhythmia interpretation, pharmacologic management of arrhythmia, cardiac anatomy and use of electrophysiologic testing. Participate in the evaluation of patients referred for electrophysiology studies, focusing on the diagnosis and management of cardiac rhythm disturbances.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 943 – CARDIOLOGY CONSULTATION SERVICE ELECTIVE**

2-4 credits.

Opportunities to learn the process involving the evaluation and management of a full spectrum of acute and chronic cardiovascular diseases, as well as preoperative consultation for hospitalized adult patients. Become familiar with the principles of effective consultation and how to operationalize this role, through evaluating patients, presenting relevant data, providing effective cardiac consultation as an integral member of a fast-paced inpatient team. Essential skills are taught, including: interpreting 12-lead electrocardiograms (ECGs) and cardiac rhythm data from telemetry with assistance, observing select cardiac diagnostic tests and reading studies with faculty or fellows. Attendance at weekly Cardiovascular Medicine Grand Rounds is required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 945 – INPATIENT CARDIOLOGY**

2-4 credits.

Supervised by house staff and attending physicians activities include: rounding on service patients, participating in scheduled procedures, presenting cases and teaching topics, and discussing patient cases. On an inpatient cardiology rotation, evaluate and manage a full spectrum of patients with acute and chronic cardiovascular problems and may provide perioperative consultations for hospitalized adult patients. Care for patients with chest pain, arrhythmias, MI, heart failure, valvular disease and shock. Learn the indications for and data provided by common cardiac diagnostic tests including ECG, echo, stress tests, bedside ultrasound and coronary angiography.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 949 – ADULT INPATIENT/OUTPATIENT CARDIOVASCULAR DISEASES ELECTIVE**

2-4 credits.

Exposure to both outpatient and inpatient settings, such as ward rounds, cardiac catheterization and electrophysiology labs, as well as operating rooms, to learn how to obtain an accurate history, perform a thorough cardiovascular examination, interpret patient's treadmill, nuclear, cardiology and echocardiogram performance, formulate an assessment and plan for further evaluation and treatment. Participate in the writing of orders and progress notes on in-patients for whom they are responsible and perform appropriate procedures under the direct supervision of staff. Submit input on patients' management plans, which will be closely supervised by an attending cardiologist.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MEDICINE 951 – AMBULATORY CARDIOLOGY ELECTIVE**

2-4 credits.

Provide a broad introduction to the cardiovascular syndromes and diseases that constitute a large part of the practice of adult medicine. This experience has been particularly useful for three groups: those who plan to enter an adult primary care discipline, those entering residency in emergency medicine, and those with an interest in adult cardiology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 955 – HEPATOLOGY ELECTIVE**

2 credits.

Exposure to inpatient and outpatient hepatology practice, focusing on functioning effectively as a consultant. The majority time is spent evaluating new and follow-up consultations in the outpatient and inpatient settings. Oral presentations and effective communication with the patient and the primary service are an essential part of this rotation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**MEDICINE 962 – ENDOCRINOLOGY ELECTIVE**

2-4 credits.

Evaluation and management of inpatient and outpatient adult endocrine disorders. Common endocrine conditions include diabetes and thyroid disorders. Other endocrinopathies as they present.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 965 – GASTROENTEROLOGY CLINICAL ELECTIVE**

2-4 credits.

Observe routine and advanced therapeutic endoscopic procedures in the Ambulatory Procedure Center and potentially in the Intensive Care Unit. Participate in the outpatient gastrointestinal (GI) clinics approximately one half day a week, which will include exposure to Inflammatory Bowel Disease, functional GI disorders, hereditary GI cancers, esophageal disorders, and pancreas and biliary disorders.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 970 – INPATIENT-OUTPATIENT****GASTROENTEROLOGY/HEPATOLOGY CONSULT SERVICE ELECTIVE**

2-4 credits.

Inpatient consultative gastroenterology emphasize outpatient evaluation care of pts with gastrointestinal (GI) diseases, providing knowledge that nearly any clinical field can use. Develop the necessary problem solving skills and knowledge to efficiently safely evaluate manage common GI disorders other diseases which may also occur in pts with chronic intestinal diseases. Be able to recall the characteristic sign/symptoms test finding in the common GI syndromes. These disorders include: neoplasms of colon, stomach and esophagus; infectious diarrhea; malabsorption syndromes; viral drug-induced hepatitis; other primary secondary gastrointestinal diseases. Evaluation of inpts admissions, ambulatory outpts consults EM consults of the Sect. of GI. These include consultations in general GI hepatology, assisting in the endoscopic procedures on pts to provide a correlation between symptoms/signs endoscopic findings understanding the appropriate use of endoscopy.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 971 – INFECTIOUS DISEASE ELECTIVE**

2-4 credits.

Inpatient clinical infectious disease management. Diagnostic approaches to infectious presentations, appropriate use of antimicrobials for treatment and prophylaxis. Role of consultants in the hospital via participation in consult team. Common conditions include cellulitis, line infections, osteomyelitis, septic arthritis, intra-abdominal infections, HIV, neutropenic fever and other infectious conditions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 976 – CLINICAL NEPHROLOGY ELECTIVE**

2-4 credits.

Evaluation of patients on inpatient and outpatient adult nephrology services. Common conditions include recognizing and diagnosing the cause of acute kidney injury (AKI), assessing factors that can alter the course of chronic kidney disease (CKD), and knowing the steps to hemodialysis initiation. Diagnosis and management of nephrology patients along with opportunities to see patients pre or post renal transplant.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MEDICINE 981 – PULMONARY DISEASE CLINIC / CONSULTS ELECTIVE**

2-4 credits.

Focuses on the evaluation and management of patients with pulmonary complaints and complex pulmonary disorders both in the inpatient and outpatient settings. Common conditions include sarcoidosis, obstructive lung disease, interstitial lung disease, pulmonary infections and pleural disease. Learn the indications for and data derived from common pulmonary tests/diagnostic procedures including, pulmonary function tests, radiographic imaging, thoracentesis and fiberopticbronchoscopy with bronchoalveolar lavage and transbronchial biopsy. Indications and management of both non-invasive and invasive mechanical ventilation will also be a focus of this rotation. Finally, learn the principles of consultation and how to function effectively in this role.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 985 – CRITICAL CARE MEDICINE ELECTIVE**

2-4 credits.

Perform direct patient care in the ICU with appropriate supervision from residents, fellows, and attendings. Independent and guided evaluation of patient will occur daily; the ability to synthesize, distill and present large amounts of information are a key skill practiced during this course. Furthermore, critical care medicine involves many medical professions; effective inter-professional teamwork is emphasized. Independent reading is expected; didactic conferences are site-specific. Topics commonly addressed in critical care medicine include pulmonary and cardiovascular physiology and pathology, ventilator support, nutritional support, renal failure, fluids and electrolytes in critical illness, and hemodynamic monitoring.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 988 – CLINICAL RHEUMATOLOGY ELECTIVE**

2-4 credits.

Exposure to patients in both outpatient rheumatology clinics and seeing patient as consultants in the inpatient setting. Commonly encountered rheumatologic conditions include: osteoarthritis, rheumatoid arthritis, lupus, systemic sclerosis, polyarteritis nodosa, ankylosing spondylitis, gout, pseudogout, dermatomyositis, low back pain and shoulder pain. Involves independent evaluation of patients, and then presenting to an attending. Independent reading is expected; didactic conferences are site-specific.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDICINE 990 – RESEARCH**

1-12 credits.

Independent research under the direct supervision of Medicine faculty. Each student's research project is individualized to meet student research goals within the context of faculty research needs.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## MEDIEVAL STUDIES (MEDIEVAL)

**MEDIEVAL/HISTORY/RELIG ST 112 – THE WORLD OF LATE ANTIQUITY (200-900 C.E.)**

4 credits.

History of the Mediterranean World from the late Roman Empire to the development of distinct European, Byzantine and Islamic civilizations (ca. 200-900 CE). Special attention will be paid to the rise and development of Christianity and Islam.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**MEDIEVAL/LITTRANS 235 – THE WORLD OF SAGAS**

3 credits.

The Icelandic sagas viewed in their social, cultural, and literary contexts. An introduction to one of the greatest bodies of vernacular literature of the early Middle Ages.

**Requisites:** None**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **MEDIEVAL/LITTRANS/RELIG ST 253 – OF DEMONS AND ANGELS. DANTE'S DIVINE COMEDY**

3 credits.

Have you ever wondered about human nature? What is our place in this world? Through readings, videos, and original images, explore and discuss Dante's answers from one of the greatest world literary classics, his Divine Comedy. From Hell, through Purgatory to Paradise, we will travel together with Dante in a universal tale of the journey of the human soul. Along the way, learn about Dante, his life and his works, development of literary history, historical and socio-political context of medieval Europe, the Mediterranean and the Middle East. Make connections that cross today's geographic and cultural lines in an exploration of literary topics, the history of ideas, and shared history, pondering universal concepts and patterns in the development of civilization that can still be observed today.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MEDIEVAL/LITTRANS 255 – BLACK DEATH AND MEDIEVAL LIFE THROUGH BOCCACCIO'S DECAMERON**

3 credits.

Have you ever wondered what it was like to live during the Black Death? Were our medieval and early-modern ancestors different from us, or are we challenged with similar problems? What can we learn from their lives? And, if we could, what could we teach each other? Discuss these topics while reading one of the world's greatest literary classics, Giovanni Boccaccio's Decameron, a text that will make us both laugh and cry. Through reading the Decameron, investigate medicine, art, culture, music, politics, religion, interpersonal and transcultural relations, warfare, fashion, gender and gender roles, as well as everyday life in the Middle Ages and early modernity. Also examines medieval written documents, twentieth-century feminist responses to the Decameron and filmic renditions of it, medieval frescoes, historical descriptions of the plague, and modern descriptions of, and reactions to, the COVID-19 pandemic.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MEDIEVAL/HISTORY/RELIG ST 309 – THE CRUSADES: CHRISTIANITY AND ISLAM**

3-4 credits.

An examination of the Crusades from both Christian and Islamic perspectives; the historical, social, and religious context and significance of the Crusades for both Christians and Muslims.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **MEDIEVAL/HIST SCI 322 – ANCIENT AND MEDIEVAL SCIENCE**

3 credits.

Scientific ideas and institutions from the beginnings of Greek philosophy to the Renaissance.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **MEDIEVAL/FOLKLORE/RELIG ST/SCAND ST 342 – NORDIC MYTHOLOGY**

3 credits.

Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MEDIEVAL/FOLKLORE/LITTRANS/SCAND ST 345 – THE NORDIC STORYTELLER**

3 credits.

Exploring the oral nature and performance traditions of folklore, ethnography, tales and ballads, literature and culture from Nordic areas and Scandinavia.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MEDIEVAL/FOLKLORE/LITTRANS 346 – IN TRANSLATION: THE ICELANDIC SAGAS**

3-4 credits.

Gain an understanding of saga literature as a genre and of the cultural history of Iceland in the Viking Era and the Middle Ages, based on the interplay between pagan codes of honor and Christian ethics.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**MEDIEVAL/SCAND ST 407 – INTRODUCTORY OLD NORSE**

3 credits.

Designed with a linguistic purpose: to obtain a reading knowledge of Old Norse-Icelandic through the study of Old Icelandic grammar and selections of Old Norse-Icelandic texts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MEDIEVAL/SCAND ST 408 – INTERMEDIATE OLD NORSE**

3 credits.

Designed with a linguistic purpose: to obtain a reading knowledge of Old Norse-Icelandic through the study of Old Icelandic grammar and selections of Old Norse-Icelandic texts.

**Requisites:** MEDIEVAL/SCAND ST/MEDIEVAL 407

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDIEVAL/SCAND ST 409 – SURVEY OF OLD NORSE-ICELANDIC LITERATURE**

3 credits.

Eddic and skaldic poetry; homilies and saints' lives, kings' sagas, sagas of the Icelanders; mythical-heroic sagas and romances; rimur.

**Requisites:** SCAND ST/MEDIEVAL/SCAND ST 407 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MEDIEVAL/SPANISH 414 – LITERATURA DE LA EDAD MEDIA CASTELLANA (SS. XII-XV)**

3 credits.

The study of a particular author, work, topic, or literary genre of the Middle Ages and/or Early Renaissance (through 15th century): Poema de mio Cid, mester de juglaria, Libro de buen amor, mester de clerecia, El conde Lucanor, La Celestina, etc.

**Requisites:** SPANISH 223 and 224. Graduate students may not enroll

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MEDIEVAL/ART HIST 415 – TOPICS IN MEDIEVAL ART**

3 credits.

Advanced topics in Medieval art. Topics may include: "Death and the Afterlife in Medieval Art"; "Civic Art and Architecture and Public Space in Medieval Italy"; "Rome in the Middle Ages"; "Pilgrimage the Cult of the Saints in Medieval Byzantine Art.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDIEVAL/ENGL 423 – TOPIC IN MEDIEVAL LITERATURE AND CULTURE**

3 credits.

Study of a topic in medieval literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**MEDIEVAL/ENGL 424 – MEDIEVAL DRAMA**

3 credits.

Dramatic traditions of medieval England, from early church rituals performed inside quiet monasteries in the tenth century to the elaborate and often raucous urban guild cycles and morality plays of the fifteenth, and with special attention to the significance of spirituality, work, and play in medieval culture.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MEDIEVAL/ENGL 425 – MEDIEVAL ROMANCE**

3 credits.

Important early form of narrative fiction, covering tales of adventure, magic, courtly love, and King Arthur from the twelfth through the fifteenth century.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**MEDIEVAL/ENGL 426 – CHAUCERS COURTLY POETRY**

3 credits.

Poetry of the most famous and influential medieval English poet, from his short lyrics on love through his dream visions of talking birds and castles built on ice to the historical romance Troilus and Criseyde. Readings will be in the original Middle English; no prior experience with the language is required.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**MEDIEVAL/ENGL 427 – CHAUCER'S CANTERBURY TALES**

3 credits.

Study of the most famous and influential medieval English poet through his best-known work and its playful and profound responses to some of the most pressing literary, social, political, and spiritual issues of his time. Readings will be in the original Middle English; no prior experience with the language is required.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**MEDIEVAL/SCAND ST 430 – THE VIKINGS**

4 credits.

Within a historical framework, a thorough introduction to the culture, literature, and religion of the Vikings.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**MEDIEVAL/ITALIAN/RELIG ST 440 – POVERTY, ECOLOGY AND THE ARTS: ST. FRANCIS OF ASSISI**

3 credits.

Focuses on literature about Francis of Assisi, from medieval accounts to contemporary literature, and related artistic portrayals of St. Francis as a religious symbol and model for economic, political and environmental justice.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MEDIEVAL/SCAND ST 444 – KALEVALA AND FINNISH FOLK-LORE**

4 credits.

Kalevala – the national epic of Finland – and the oral literature of Finland.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**MEDIEVAL/FOLKLORE/SCAND ST 446 – CELTIC-SCANDINAVIAN CULTURAL INTERRELATIONS**

3 credits.

Examination of shared traditions and historical connections between the North and Northwest of Europe. Readings of medieval and pre-modern Scandinavian, Scottish, Welsh and Irish sagas, histories, tales. Discussion of the role of folklore in modern Celtic and Scandinavian societies.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MEDIEVAL/AFRICAN/JEWISH/RELIG ST 462 – MUSLIMS AND JEWS**

3 credits.

Explores the historical relationship between Muslims and Jews in a variety of contexts from the seventh century to the present. Surveys literary and cultural exchanges against the background of shifting political and social conditions across the Middle East, Europe, and the United States. Considers also the parallel legacies of anti-Semitism, Orientalism, and Islamophobia. Major themes include comparative religion, secularization, migration, and colonialism, as well as the politics of history and cultural memory. Introduces readings in English translation of medieval and modern texts originally written across languages, and especially in Hebrew and Arabic.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**MEDIEVAL/SPANISH 503 – SURVEY OF MEDIEVAL LITERATURE**

3 credits.

Introduction to major 13th and 14th-century Castilian works.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018

**MEDIEVAL/SPANISH 504 – SURVEY OF MEDIEVAL LITERATURE**

3 credits.

Introduction to major 14th and 15th-century Castilian works.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**MEDIEVAL/ENGL 520 – OLD ENGLISH**

3 credits.

The elements of Old English grammar with selected readings.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MEDIEVAL/ENGL 521 – ADVANCED OLD ENGLISH LITERATURE**

3 credits.

An intensive study of a major work or works of Old English, usually focusing on either Beowulf or the poems of a single manuscript. Line-by-line translation of the text will be supplemented by discussion of related issues (whether linguistic, thematic, or contextual) as well as by readings from relevant critical literature. Primary texts will be read in Old English.

**Requisites:** ENGL/MEDIEVAL/ENGL 520**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

Honors - Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**MEDIEVAL/SPANISH 541 – OLD SPANISH**

3 credits.

Historical Spanish phonology, morphology, and syntax, with application to theories of language variation and change.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**MEDIEVAL/LATIN 563 – MEDIAEVAL LATIN**

3 credits.

Introduction to chronological, geographical, and generic range of post-classical Latin, including not only the "medieval" period but the late antique, Renaissance, and beyond.

**Requisites:** LATIN 306 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**MEDIEVAL/GERMAN 651 – INTRODUCTION TO MIDDLE HIGH GERMAN**

3 credits.

Middle High German grammar and vocabulary with the goals of fluency and accuracy in reading medieval texts. Covers topics in phonology, morphology, syntax, and lexicon.

**Requisites:** (GERMAN 249, 258, and 262), (GERMAN 249 and 285), or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**MEDIEVAL/ITALIAN 659 – DANTE'S DIVINA COMMEDIA**

3 credits.

Lectures on Dante's life and times, reading Divine Comedy.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**MEDIEVAL/ITALIAN 671 – THE 13TH CENTURY**

3 credits.

Systematic study of the earliest literary texts in Italy; the rise of the love lyric among the Sicilian poets; representative narrative works. The development of the lyric from Guittoe d'Arezzo to the poets of the Dolce Stil Nuovo.

**Requisites:** ITALIAN 321, 322, or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**MEDIEVAL 699 – DIRECTED STUDY**

1-3 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2012**MEDIEVAL/FRENCH 701 – INTRODUCTION TO OLD FRENCH**

3 credits.

Introduction to Old French with an emphasis on reading. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2015**MEDIEVAL/FRENCH 704 – LA LITTERATURE FRANCAISE DU XIV ET DU XV SIECLE**

3 credits.

Study of important literary works of the 14th and 15th centuries. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**MEDIEVAL/FRENCH 705 – LA LITTERATURE FRANCAISE DES DEBUTS JUSQU A LA FIN DU XIII SIECLE**

3 credits.

Study of important medieval literary works up to the 13th century. Taught in French.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**MEDIEVAL/SPANISH 718 – TOPICS IN MEDIEVAL SPANISH LITERATURE**

3 credits.

An advanced topics course focusing on themes, particular authors, individual works, or literary genres in medieval Spanish literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**MEDIEVAL/GERMAN 755 – OLD GERMANIC LANGUAGES**

3 credits.

Old High German, Old Saxon, and Gothic on a rotating basis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDIEVAL/ENGL 803 – TOPICS IN MEDIEVAL LITERATURE**

3 credits.

Study of a topic in Medieval literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MEDIEVAL/SPANISH 842 – SEMINAR-MEDIEVAL LITERATURE**

3 credits.

Seminar focusing on literary, textual criticism or theoretical topics relevant to Medieval Spanish literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MICROBIOLOGY (MICROBIO)****MICROBIO 100 – THE MICROBIAL WORLD**

3 credits.

Primarily for non-science majors. Roles of microorganisms and viruses in nature, health, agriculture, pollution control and ecology. Principles of disease production, epidemiology and body defense mechanisms. Biotechnology and the genetic engineering revolution.

**Requisites:** Not open to students with credit for MICROBIO 101 or 303.**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022

**MICROBIO 101 – GENERAL MICROBIOLOGY**

3 credits.

Survey of microorganisms and their activities; emphasis on structure, function, ecology, nutrition, physiology, genetics. Survey of applied microbiology--medical, agricultural, food and industrial microbiology. Intended to satisfy any curriculum which requires introductory level microbiology.

**Requisites:** CHEM 103, 108, 109, or 115. Not open to students with credit for MICROBIO 303

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 102 – GENERAL MICROBIOLOGY LABORATORY**

2 credits.

Covers techniques and procedures used in general microbiology, including cultivation, enumeration, aseptic techniques, physiology and selected applications.

**Requisites:** MICROBIO 101, 303 or concurrent enrollment. Not open to students with credit for MICROBIO 304.

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 299 – INDEPENDENT STUDY**

1-3 credits.

Research work for students under direct guidance of a faculty member in an area encompassing Microbiology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MICROBIO 303 – BIOLOGY OF MICROORGANISMS**

3 credits.

Basic biology of microorganisms, including structure, function, physiology, genetics, ecology, diversity, and evolution.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or BOTANY/BIOLOGY/BOTANY 130) and (CHEM 104 or 109) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 304 – BIOLOGY OF MICROORGANISMS LABORATORY**

2 credits.

Introduction to modern laboratory techniques used to study the distribution and properties of microorganisms.

**Requisites:** MICROBIO 303 or concurrent enrollment

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 305 – CRITICAL ANALYSES IN MICROBIOLOGY**

1 credit.

Train students to become scientific problem-solvers, to critically analyze data, and to comprehend the principles of microbiological research via active discussion of a combination of scholarly papers and contemporary, hot topics in our field.

**Requisites:** MICROBIO 303 or concurrent enrollment

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO/FOOD SCI 324 – FOOD MICROBIOLOGY LABORATORY**

2 credits.

Lab exercises dealing with food preservation, spoilage, and food poisoning. Isolation, identification and quantification of specific microbes occurring in foods, and food fermentations by bacteria and yeast.

**Requisites:** (MICROBIO 102 or MICROBIO 304) and MICROBIO/FOOD SCI/MICROBIO 325 or concurrent enrollment

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MICROBIO/FOOD SCI 325 – FOOD MICROBIOLOGY**

3 credits.

Principles of food preservation, epidemiology of foodborne illness, agents of foodborne illness, food fermentations and biotechnology.

**Requisites:** MICROBIO 101, 303, or M M & I 301 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MICROBIO 330 – HOST-PARASITE INTERACTIONS**

3 credits.

Interrelationships between bacterial and viral parasites and their host cells or tissues. Stresses microbial strategies and mechanisms of colonization, invasion, pathogenesis and resistance of host defenses.

**Requisites:** MICROBIO 101 or 303 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**MICROBIO/AN SCI/BOTANY 335 – THE MICROBIOME OF PLANTS, ANIMALS, AND HUMANS**

3 credits.

Examination of the structure and function of microbial communities that live inside and on host organisms (plants, animals, and humans). Introduction to general concepts of the microbiome and microbiota, and their relationship to host nutrition, health, and disease.

**Requisites:** MICROBIO 101 or 303 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 345 – INTRODUCTION TO DISEASE BIOLOGY**

3 credits.

Introduces the rich biology of infectious disease and how it impacts the biology of humans and other organisms, through the lens of global health. Steps beyond a narrow focus on the biological dimensions of disease to also cover the social, political, and cultural factors that shape the spread and persistence of disease in natural populations. Includes a survey of the various types of pathogens and the science behind infection, transmission, evolution, and virulence.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 375 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to undergraduate students.

**Requisites:** None

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**MICROBIO 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in the Bacteriology department and a internship site supervisor.

Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Workplace – Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2013

**MICROBIO 400 – STUDY ABROAD IN MICROBIOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**MICROBIO/SOIL SCI 425 – ENVIRONMENTAL MICROBIOLOGY**

3 credits.

Microbial interactions in soils, water, extreme environments and biofilms. Modern methods for studying microbial ecology. role of microbes in nutrient cycles and biogeochemistry. Use of microbes for mitigating manmade environmental problems of industrial, agricultural, and domestic origin.

**Requisites:** MICROBIO 303 and (CHEM 341 or 343), or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MICROBIO 450 – DIVERSITY, ECOLOGY AND EVOLUTION OF MICROORGANISMS**

3 credits.

Fundamental concepts relating to the phylogenetic diversity, ecology and evolution of microbes. Active learning methods applying these concepts will promote a deeper understanding of microbiology.

**Requisites:** MICROBIO 303 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 470 – MICROBIAL GENETICS & MOLECULAR MACHINES**

3 credits.

Examines modern microbial genetics and molecular processes. Emphasis on the use of eubacterial and eukaryotic microbes to elucidate cellular function. Discussion of experimental approaches to study microbes and their use in biotechnology, bioremediation, and medicine.

**Requisites:** MICROBIO 303 or concurrent enrollment or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 520 – PLANETARY MICROBIOLOGY: WHAT LIFE HERE TELLS US ABOUT LIFE OUT THERE**

3 credits.

Connects the molecular underpinnings of life with corresponding planetary scale changes in geochemistry. Focuses on the dynamics between life and environment over planet Earth's history from a microbial and molecular perspective, including the origins of life, and emergence of essential metabolisms and their evolution across billions of years of planetary evolution. Discusses how innovations such as translation machinery and carbon and nitrogen fixation were impacted by significant changes in the environment. Examines how understanding the origins of life on Earth may allow for the recognition of life elsewhere in the universe by exploring, assessing, and discussing various signs of life and the processes that expands life to planetary scale.

**Requisites:** MICROBIO 101 or 303 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO/SOIL SCI 523 – SOIL MICROBIOLOGY AND BIOCHEMISTRY**

3 credits.

Transformations of nutrients and contaminants in soils and groundwater by microorganisms: emphasis on enzymatic mechanisms and metabolic pathways. Approaches for analyzing microbial populations and activities including molecular techniques. Applications of microbial activities for bioremediation of contaminated soils and groundwater. Students should have completed one course in either Soil Science or Microbiology to feel comfortable with the course content.

**Requisites:** Senior standing, (CHEM 104, 109, or 116) and (BIOLOGY/ZOOLOGY/BIOLOGY 102, BIOLOGY/BOTANY/BIOLOGY 130, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 525 – FIELD STUDIES OF PLANETARY MICROBIOLOGY AND LIFE IN THE UNIVERSE**

3 credits.

Explores the origins, early evolution, and most common traces left by our planet's form of microbial life. Discovery and interpretation of microbial biosignatures in the context of a simulated surface lander mission through travel to field sites. Introduction to microbial biosignatures as inferred through satellite and drone imagery interpretation, portable XRF elemental analysis, UV-VIS-IR spectrophotometry, body and trace fossil analysis and interpretation, and metagenome sequencing. Explore evidence and methods of detection of life on other planets.

**Requisites:** MICROBIO 520 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**MICROBIO 526 – PHYSIOLOGY OF MICROORGANISMS**

3 credits.

Biochemistry of microbial processes.

**Requisites:** (BIOCHEM 501 or 507 or concurrent enrollment) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **MICROBIO 527 – ADVANCED LABORATORY TECHNIQUES IN MICROBIOLOGY**

2 credits.

Provides a foundation in modern methods of research in the biomedical sciences. Coaching and practice in hypothesis-driven scientific questions, critical data analysis, and scientific writing.

**Requisites:** Declared in Microbiology and MICROBIO 304

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MICROBIO/ONCOLOGY 545 – TOPICS IN BIOTECHNOLOGY**

1 credit.

Seminars on current topics in agricultural, medical, and industrial biotechnology such as: microbiological production of food, drink, biopharmaceuticals; production methods, genetic engineering (vectors, recombination cloning), continuous fermentation; bioconversion processes and production of chemicals from biomass; plant biotechnology; transgenic animals.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or BOTANY/BIOLOGY/BOTANY 130) and (CHEM 104 or 109) or graduate/professional standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MICROBIO 551 – CAPSTONE RESEARCH PROJECT IN MICROBIOLOGY**

2 credits.

Conduct independent research in either a PI's laboratory or in small groups in microbiology teaching laboratories. Discuss progress of projects and research ethics, write a research proposal, and prepare and present a poster with final results for the department Poster Session. The in-class students use microbiological, molecular, and bioinformatic approaches to investigate the microbial ecology of environmental microbial communities. Research-lab students will progress toward goals established by the research mentor / PI.

**Requisites:** MICROBIO 527

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MICROBIO 607 – ADVANCED MICROBIAL GENETICS**

3 credits.

Molecular genetic methods and related aspects of prokaryotic and lower eukaryotic biology, as well as critical analysis of the scientific literature. Approximately two-thirds of the course will focus on prokaryotes and one-third on lower eukaryotic microbes.

**Requisites:** MICROBIO 470 or GENETICS 468 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **MICROBIO/BIOCHEM/GENETICS 612 – PROKARYOTIC MOLECULAR BIOLOGY**

3 credits.

Molecular basis of bacterial physiology and genetics with emphasis on molecular mechanisms; topics include nucleic acid-protein interactions, transcription, translation, replication, recombination, regulation of gene expression.

**Requisites:** (BIOCHEM 501 or 507) and (MICROBIO 470, GENETICS 466 or 468) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MICROBIO 626 – MICROBIAL AND CELLULAR METABOLOMICS**

3 credits.

Provides an in-depth exploration of the use of mass spectrometry-based metabolomic approaches for the quantitative investigation of microbial and mammalian cellular metabolic processes. Using recent examples from primary literature, highlights the application of metabolomics, lipidomics, and metabolic flux analysis to diverse areas, including rational engineering of metabolic pathways, microbial biofuel production, discovery and characterization of new biochemical pathways, metabolic interactions within microbial communities, biochemical capabilities of the human gut microbiome, and mammalian cell metabolism.

**Requisites:** (ZOOLOGY/BIOLOGY/ZOOLOGY 101, ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151, BIOCORE 383, or BIOLOGY/BOTANY/BIOLOGY 130), (CHEM 341 or 343), and (BIOCHEM 301, 501, or 507), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**MICROBIO 632 – INDUSTRIAL MICROBIOLOGY/BIOTECHNOLOGY**  
2 credits.

Application of modern techniques of genetics and physiology to the large-scale production of microbial products; industrial strain improvement; scale-up of microbial processes; survey of industrial processes using microorganisms.

**Requisites:** MICROBIO 526 or (BIOCHEM 507 and 508) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**MICROBIO 657 – BIOINFORMATICS FOR MICROBIOLOGISTS**  
3 credits.

Provides a practical and fundamental introduction to sequence-based analysis focused on microbial systems. Emphasis on gaining a basic understanding of the principles of both classical and newer algorithms useful for bioinformatic analysis. Topics include: BLAST; RNA-seq analysis; transcriptional binding prediction; genome sequence assembly, analysis and annotation; and comparative genomics. Note that this course requires that each student have access to a laptop that runs a linux/unix Operating System such as a Mac or a ChromeBook. PC Laptops running a VM are also acceptable. No prior knowledge of computational biology is required.

**Requisites:** MICROBIO 303, BIOCHEM 501, GENETICS 466, or 467 or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO/BMOLCHEM 668 – MICROBIOLOGY AT ATOMIC RESOLUTION**  
3 credits.

Three-dimensional protein structures form the basis for discussions of high resolution microbiology; how particular problems are solved with given protein architectures and chemistries and how themes of protein structure are modified and recycled.

**Requisites:** (BIOCHEM 501 or 507) and (MICROBIO 470 or 612) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 681 – SENIOR HONORS THESIS**  
2-3 credits.

Individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 682 – SENIOR HONORS THESIS**  
2-4 credits.

Second semester of individual study for majors completing theses for Honors degrees as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 691 – SENIOR THESIS**  
2 credits.

Individual study for majors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MICROBIO 692 – SENIOR THESIS**  
2 credits.

Second semester of individual study for majors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MICROBIO 699 – SPECIAL PROBLEMS**  
1-4 credits.

Individual advanced work in an area of Microbiology under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MICROBIO 710 – MICROBIAL SYMBIOSIS**

3 credits.

Covers the themes and diversity of plant and animal associations with microbes with an emphasis on beneficial relationships. Examples will be drawn from recent literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 731 – SEMINAR**

1 credit.

Reviews of microbiological subjects, and reports on research work.

**Requisites:** Declared in Microbiology doctoral program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MICROBIO 810 – CURRENT ISSUES IN MICROBIOLOGY**

1 credit.

Explores the diversity of scientific topics comprising the field of contemporary microbiology.

**Requisites:** Declared in Microbiology doctoral program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MICROBIO 811 – ADVANCED PROBLEMS IN MICROBIOLOGY**

1 credit.

Explores the diversity of scientific topics comprising the field of contemporary microbiology.

**Requisites:** Declared in Microbiology doctoral program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 875 – SPECIAL TOPICS**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MICROBIO 899 – INDEPENDENT STUDY**

1-9 credits.

Independent study or research under the direction of a faculty member in the area of biological science.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**MICROBIO 901 – ADVANCED SEMINAR**

1 credit.

Recent advances in specialized areas of microbiology.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**MICROBIO/BIOCHEM 917 – REGULATION OF GENE EXPRESSION (ADVANCED SEMINAR)**

1 credit.

Analysis of recent literature in topics related to prokaryotic and eukaryotic gene regulation, including regulation of transcription, translation, and genome organization.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MICROBIO 990 – RESEARCH**

1-9 credits.

Full lab and literature review of a problem in microbiology. Leads to preparation of thesis and publication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MILITARY SCIENCE (MIL SCI)****MIL SCI 101 – FOUNDATIONS OF OFFICERSHIP**

1 credit.

Introduction to life as a commissioned officer. Establishes fundamentals of leadership, Army values and skills required of a successful Army officer.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MIL SCI 102 – BASIC LEADERSHIP**

1 credit.

Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefing and effective writing, goal setting, techniques for improving listening and speaking skills and an introduction to counseling.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MIL SCI 110 – LEADERSHIP LAB 1A**

1 credit.

Develop proficiency with hands-on experience in a field environment. Specific activities include military navigation, employment of communications and weapon systems, rappelling, and small unit tactics.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 111 – LEADERSHIP LAB 1B**

1 credit.

Continuation of MIL SCI 110

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 201 – INDIVIDUAL LEADERSHIP STUDIES**

2 credits.

Identify successful leadership characteristics through observation of others and self through experiential learning exercises. Record observed traits (good and bad) in a dimensional leadership journal and discuss observations in small group settings. Learn map reading and land navigation skills, including conversion of magnetic and grid azimuths and resection.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 202 – LEADERSHIP AND TEAMWORK**

2 credits.

Study examines how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process and obtaining team buy-in through immediate feedback.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 210 – LEADERSHIP LAB 2A**

1 credit.

Implement small unit tactical training, learn Army methods for approaching and reacting to tactical situations. Covers land navigation skills, information processing skills, and Army leadership principles.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 211 – LEADERSHIP LAB 2B**

1 credit.

Army organization and planning methods, and the opportunity to practice and implement these methods in practical exercises.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 301 – LEADERSHIP AND PROBLEM SOLVING**

2 credits.

Conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem solving techniques. Receive direct feedback on leadership abilities.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 302 – LEADERSHIP AND ETHICS**

2 credits.

Examines the role communications, values and ethics play in effective leadership. Topics include ethical decision-making, consideration of others and survey Army leadership doctrine. Emphasis is on improving oral and written communication abilities, and increasing small unit tactics skills.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 310 – LEADERSHIP LAB 3A**

1 credit.

Small unit tactical troop leading procedures are taught and practiced. Hand signals, operations orders, and land navigation skills are perfected for preparation for national advanced leadership camp.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 311 – LEADERSHIP LAB 3B**

1 credit.

Learn in-depth leadership procedures, and practice the Army planning process for groups of 30 personnel. Learn how to conduct Army training and classes in order to teach other cadets based on prior knowledge.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 401 – LEADERSHIP AND MANAGEMENT**

2 credits.

Develop proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Explore training management methods of effective staff collaboration, and developmental counseling techniques.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 402 – OFFICERSHIP**

2 credits.

Includes fundamentals of military law, administrative and logistics procedures and practical exercises on establishing an ethical command climate. Presentations, briefings and leadership positions are used to train and evaluate.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023

**MIL SCI 410 – LEADERSHIP LAB 4A**

1 credit.

Learn how to allocate resources and time to adequately train large groups of people. Practice creating training plans, and bringing together all of the elements necessary to complete training. Opportunities to aid in the evaluation of others leadership, which gives them the ability to better review their own leadership.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Fall 2022**MIL SCI 411 – LEADERSHIP LAB 4B**

1 credit.

Learn the final elements of an Army officer's job. Mentor and plan training, as well as monitor the effectiveness of others. Learn fine points of improving others performance and getting the most out of subordinates.

**Requisites:** Consent of instructor**Repeatable for Credit:** No**Last Taught:** Spring 2023**MIL SCI 491 – AMERICAN MILITARY HISTORY**

3 credits.

Surveys the American military experience from the Colonial Era to the present. Focus on learning about: the nature of combat, the impact of new technology on warfare, the relationship between civilian and military authorities, the impact of leadership, and the influence of political, social, and economic factors on military operations.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2018

## MOLECULAR AND ENVIRONMENTAL TOXICOLOGY CENTER (M&ENVTOX)

**M&ENVTOX/ONCOLOGY/PHM SCI/PHMCOL-M/POP HLTH 625 – TOXICOLOGY I**

3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

**Requisites:** (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or (BIOCORE 485 486)) and PATH 404; or graduate/professional standing**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**M&ENVTOX/PATH/PHM SCI/PHMCOL-M/POP HLTH 626 – TOXICOLOGY II**

3 credits.

Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

**Requisites:** MENVTOX/ONCOLOGY/PHMCOL-M/PHM SCI/POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHMCOL-M 625**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**M&ENVTOX/CIV ENGR/SOIL SCI 631 – TOXICANTS IN THE ENVIRONMENT: SOURCES, DISTRIBUTION, FATE, & EFFECTS**

3 credits.

Nature, sources, distribution, and fate of contaminants in air, water, soil, and food and potential for harmful exposure.

**Requisites:** (CHEM 104, 109, or 116) and (MATH 211, 217, 221, or 275) and PHYSICS (104, 202, 208, or 248)**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 632 – ECOTOXICOLOGY: THE CHEMICAL PLAYERS**

1 credit.

Introduction to natural and man-made toxins/toxicants, their distribution, transport, and fate in the environment.

**Requisites:** (CHEM 341 or 343) and ((BIOLOGY/BOTANY/BIOLOGY 130 and BIOLOGY/ZOOLOGY/BIOLOGY 102) or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or BIOCORE 383); or graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Fall 2019**M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 633 – ECOTOXICOLOGY: IMPACTS ON INDIVIDUALS**

1 credit.

Addresses absorption, biotransformation, elimination of toxins in a wide variety of taxa (plants, invertebrates, vertebrates).

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 632**Repeatable for Credit:** No**Last Taught:** Fall 2019

**M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 634 – ECOTOXICOLOGY: IMPACTS ON POPULATIONS, COMMUNITIES AND ECOSYSTEMS**

1 credit.

Focuses on the impact of toxicants on populations, communities, ecosystems, and includes risk evaluation. Includes lectures, current research presentations, and discussions.

**Requisites:** AGRONOMY/ENTOM/FW ECOL/M&ENVTOX/AGRONOMY/ENTOM/F&W ECOL 633 or declared in Molecular and Environmental Toxicology, PhD program

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**M&ENVTOX 699 – SPECIAL PROBLEMS**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**M&ENVTOX/POP HLTH 789 – PRINCIPLES OF ENVIRONMENTAL HEALTH: A SYSTEMS THINKING APPROACH**

3 credits.

Provides an overview of the field of environmental health, using a systems thinking approach. Systems thinking recognizes that environmental health problem solving is complex and that solutions in one area may have positive or negative impacts on other areas. An introduction to the history of environmental health within the field of public health from the local to the federal and global level. Introduces multiple disciplines, methods and approaches to numerous environmental health topics. Includes introduction to methods and tools necessary for assessing human health risks from a variety of environmental hazards and exposures found in air, land, and water with a focus on physical and chemical risks. Additional details regarding specific hazard, exposure and health outcome data and their relationship to environmental health risk assessment, environmental health decision-making and management form a public health practice perspective will be discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**M&ENVTOX 800 – SEMINAR**

1 credit.

Current research in environmental toxicology and pathology and other topics of interest and importance to environmental toxicologists.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**M&ENVTOX 801 – SCIENTIFIC COMMUNICATION IN MOLECULAR & ENVIRONMENTAL TOXICOLOGY**

2 credits.

Provides an overview of scientific communication; specifically, students will be exposed to the various methods of communicating their science including articles, proposals, presentations / lectures, and posters. Strategies will demonstrate best practices for each method and enable students to critically define what sets apart good examples from poor. Classroom discussions allow for comprehension of these means. Assignments are designed to familiarize the students with these methods. Students will have classroom instruction and the opportunity to learn from peer mentors as well as laboratory directors on different preferences and approaches to science communication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**M&ENVTOX 990 – RESEARCH**

1-9 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MOLECULAR BIOLOGY (MOL BIOL)****MOL BIOL 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member. Must be declared in an honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MOL BIOL 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member. Must have completed MOL BIO 681 and declared in an honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**MOL BIOL 686 – SENIOR HONORS SEMINAR IN MOLECULAR BIOLOGY**

1 credit.

A seminar on the origins, present frontiers, and future prospects of molecular biology.

**Requisites:** Senior standing and declared in an Honors program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MOL BIOL 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MOL BIOL 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member. Must have completed MOL BIO 691.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MOL BIOL 699 – DIRECTED STUDIES IN MOLECULAR BIOLOGY**

1-4 credits.

Individual research projects conducted under professorial supervision.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC (MUSIC)****MUSIC 34 – STUDY ABROAD: MUSIC PERFORMANCE ENSEMBLE**

1 credit.

A music performing ensemble course taken in a UW-Madison resident study abroad program. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**MUSIC 40 – WIND ENSEMBLE**

1 credit.

Rehearsal and performance of music from wind ensemble and band literature. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 41 – CONCERT BAND**

1 credit.

Rehearsal and performance of music from wind ensemble and band literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special students)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 42 – VARSITY BAND**

1 credit.

Rehearsal and performance of music for athletic events. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 43 – UNIVERSITY BAND**

1 credit.

Exploration and performance of standard band literature.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 50 – CONCERT CHOIR**

1 credit.

Choral vocal training, study and performance of concert literature. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 52 – TREBLE CHOIR**

1 credit.

Explore, rehearse, study, and perform choral repertoire for treble voices.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 53 – CHORAL UNION**

1 credit.

Choral vocal training, study and performance. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 55 – MASTERS' SINGERS**

1 credit.

Choral vocal training, study and performance of concert literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special students)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**MUSIC 56 – CHORALE**

1 credit.

Choral vocal training, study and performance of concert literature. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 58 – MADRIGAL SINGERS**

1 credit.

Ensemble specializing in 16th- and 17th-century secular music. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 59 – UNIVERSITY CHORUS**

1 credit.

Exploration and performance of standard choral literature.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**MUSIC 60 – ALL-UNIVERSITY STRING ORCHESTRA**

1 credit.

Rehearsal and study of string orchestra literature at the introductory level.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 61 – CHAMBER ORCHESTRA**

1 credit.

Rehearsal, study and performance of early classical symphonies, opera, and concerto literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Undergraduate students only (excludes Grad, Pharm, Law, Med, Vet Med, Guest, Special students)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**MUSIC 62 – UNIVERSITY SYMPHONY ORCHESTRA**

1 credit.

Playing and public performance of music from symphonic repertoire. Audition required.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 101 – THE MUSICAL EXPERIENCE**

3 credits.

Musical genres -- songs, opera and musical theater, chamber and orchestral music, and jazz -- in the context of social and cultural history.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 102 – JAZZ IN 20TH-CENTURY AMERICA**

3 credits.

Examines cultural influences on the development of jazz. Explores historical and ethnographic works by scholars in ethnomusicology, history, anthropology, and communication in order to understand cultural influences of traditional and contemporary genres of jazz. Major topics include syncretism, nationalism, modernity, ethnicity, gender, colonialism, and globalization of modern America. Emphasis on cross-cultural understanding and interdisciplinarity in jazz performance.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC/FOLKLORE 103 – INTRODUCTION TO MUSIC CULTURES OF THE WORLD**

3 credits.

An introductory ethnomusicology course providing a variety of ways to approach musics typically not covered in music history courses. Active engagement with these musics within their larger world contexts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 104 – STUDY ABROAD: ELEMENTARY MUSIC APPRECIATION/THEORY/HISTORY**

1-3 credits.

An elementary-level academic course in music taken in a UW-Madison resident study abroad program. Course does not require any previous background in music. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

### **MUSIC 105 – STORYTELLING ON STAGE: INTRODUCTION TO MUSICAL THEATER AND OPERA**

3 credits.

Introduction to musical theater and opera in Europe and America, with emphasis on the ways creators tell their stories through the interaction of music and drama. Topics include the histories and formations of the genres and their relationships to culture and society; principal creators and performers; distinctive features of representative works; relationships to film and other media; and treatments of race, class, gender, and other issues in selected examples of each genre.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MUSIC 106 – THE SYMPHONY**

3 credits.

Orchestral music from Haydn to present, relation to other arts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **MUSIC 107 – MUSIC & FILM**

3 credits.

A survey of film music by the major film composers. Will include study of film scores by, among others, Alfred Newman, Max Steiner, Bernard Herrmann, and Ennio Morricone, as well as a discussion of current trends and film composers. In addition, there will be discussion of the contributions of composers such as Aaron Copland, Serge Prokofiev and Leonard Bernstein. The techniques and styles of film music will be explored through lectures, required listening, readings and viewing of relevant films.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **MUSIC 113 – MUSIC IN PERFORMANCE**

1 credit.

Descriptive lectures on chamber music with performances by instructor and others.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

### **MUSIC 121 – MUSICA PRACTICA 1**

3 credits.

Strategies for composing, understanding, and writing about music.

**Requisites:** Declared in Music, Music: Performance or Music: Education

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MUSIC 122 – MUSICA PRACTICA 2**

3 credits.

Continuation of strategies for composing, understanding, and writing about music.

**Requisites:** MUSIC 121 and 171 and concurrent enrollment in MUSIC 172

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MUSIC 151 – BASIC CONCEPTS OF MUSIC THEORY**

3 credits.

Basic tools of music theory and compositional forms. Explores development of music through general survey of musical styles. Practical application of concepts includes listening maps and simple composition projects. Includes performance opportunities in simulated real world settings.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MUSIC 152 – BASIC CONCEPTS OF MUSIC 2**

3 credits.

The "building blocks" of music for non-majors. Deepens one's understanding of music through hands-on experience with its component materials: melody and harmony, rhythm and meter. It has the additional aim of increasing one's fluency in read music, broadening one's acquaintance with scores and various other musical media old and new, and improving one's skills as a listener. Students will explore basic musical concepts in a lab-like environment and solve various compositional problems and analytical puzzles.

**Requisites:** MUSIC 151

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**MUSIC 171 – MUSICA PRACTICA: AURAL SKILLS 1**

1 credit.

Introductory instruction in aural skills.

**Requisites:** Concurrent enrollment in MUSIC 121**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 172 – MUSICA PRACTICA: AURAL SKILLS 2**

1 credit.

Continuation of introductory instruction in aural skills.

**Requisites:** MUSIC 171 and concurrent enrollment in MUSIC 122**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 201 – MUSIC AND SOCIETY**

2 credits.

Music during defined historical periods with emphasis on political and social contexts. May concentrate on a specific era or geographical area.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**MUSIC 202 – DELTA BLUES**

3 credits.

Traces the history of the blues in America's racial history. Begins by examining the living conditions that produced the blues in rural Mississippi (sharecropping, the cotton industry, the Great Flood of 1927). Continues by detailing the emergence of blues in the early recording industry (Paramount, OKeh), including the earliest examples (W.C. Handy, Mamie Smith), as well as the singers emerging in the 1920s (Blind Lemon Jefferson, Charley Patton, Robert Johnson). Follows migrations northward to Memphis (jug bands) and Chicago (electric blues), tracing the emerging importance of radio and live performance (King Biscuit Time, WDIA, the Chittlin' Circuit), living conditions in Chicago (Maxwell Street). Tracks early marketing of blues to white audiences (Josh White, Lead Belly). Ends with the reemergence of the blues as '60s folk music (Son House, Sonny Boy Williamson II) and British Invasion (Yardbirds). Supplemented with extensive musical selections, documentary footage of interviews.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2021**MUSIC 203 – AMERICAN ETHNICITIES AND POPULAR SONG**

3 credits.

Examination of the role played by popular song in the formation of ethnic and racial identities in the United States with particular emphasis placed on both music's role in the perpetuation of racism and its use as a form of protest and anti-racist activism.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**MUSIC 204 – STUDY ABROAD: INTERMEDIATE MUSIC THEORY OR HISTORY**

1-3 credits.

An intermediate-level academic course in music taken in a UW-Madison resident study abroad program. Course must be taught at an intermediate level as determined by the School of Music based on prerequisites and/or course syllabus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**MUSIC 205 – THE BIG BANDS**

2 credits.

A study of significant dance orchestras from 1920 to 1950: development of style and influence on popular musical taste.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**MUSIC 206 – THE LEGENDARY PERFORMERS**

2 credits.

A survey of pioneer performers who influenced popular musical taste from 1920 to 1950.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019

**MUSIC 211 – SURVEY OF THE HISTORY OF WESTERN MUSIC**

3 credits.

Introduction to development of music in the European tradition, before 1750.

**Requisites:** MUSIC 122 and 172

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 212 – SURVEY OF THE HISTORY OF WESTERN MUSIC**

3 credits.

Introduction to development of music in the European tradition, 1750 to the present.

**Requisites:** MUSIC 211

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 221 – MUSICA PRACTICA 3**

3 credits.

Advanced strategies for composing, understanding, and writing about music.

**Requisites:** MUSIC 122 and 172

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 222 – MUSICA PRACTICA 4**

3 credits.

Advanced strategies for composing, understanding, and writing about music.

**Requisites:** MUSIC 221 and concurrent enrollment in MUSIC 272

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 229 – JAZZ THEORY & COMPOSITION**

3 credits.

Introduction to the applied theory of functional tonal and modal jazz harmony; analysis of song forms from the standard jazz repertoire; study of reharmonization techniques, chord substitution, and types of chord voicings; principles of melodic writing and motivic development, jazz counterpoint, and voice-leading considerations; and writing for common instruments in jazz ensembles. Students will analyze compositions from the standard jazz repertoire and apply the principles studied to create their own compositions for small jazz ensemble.

**Requisites:** MUSIC 122 and 172

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 236 – BASCOM COURSE**

3 credits.

A low-enrollment course developing skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MUSIC 240 – INTERPLAY BETWEEN MUSIC, ART, AND SOCIETY**

3 credits.

Explore the relationships between the arts as they intersect with aspects of society, historically and in the present day, through various visual, auditory, and text-based expressive forms. Examine personal life experiences and ideas along with current issues related to music and art, and practice self-expression through the arts. No previous experience in any art form is necessary.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**MUSIC 252 – INTRODUCTION TO CONDUCTING AND PEDAGOGY**

2 credits.

Introduction to the basic elements in conducting. Students will learn elementary conducting skills including technique, score study, rehearsal preparation, rehearsal structure, private studio construction, teaching techniques, and professional marketing.

**Requisites:** MUSIC 212, 221, and 271

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 253 – CONDUCTING**

2 credits.

Conducting techniques, emphasis on practical application to vocal and instrumental groups.

**Requisites:** MUSIC 212, 221, and 271

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 254 – CONDUCTING**

2 credits.

Continuation of conducting techniques, emphasis on practical application to vocal and instrumental groups.

**Requisites:** MUSIC 253

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 256 – UNIVERSITY OPERA**

1-2 credits.

Opera role: preparation, rehearsal and performance in University opera production. Contact School of Music for audition information

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 257 – OPERA WORKSHOP**

2 credits.

Performance of scenes from standard operas, including singing, accompanying, and dramatic action; instruction in voice projection, posture, and gesture; problems of staging, lighting, costuming, and scenery. Contact School of Music for audition information

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 260 – GLOBAL HAND DRUMMING ENSEMBLE: SURVEY OF SELECTED GLOBAL HAND DRUMMING TRADITIONS**

1 credit.

Exploration of a variety of global drumming traditions culminating in group performance opportunities. Learn specific techniques and rhythms as well as skills required to facilitate drum circles for all levels of players.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 262 – JAZZ ENSEMBLE**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 262

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 264 – ENSEMBLE: WISCONSIN SINGERS**

1 credit.

The training of singers and musicians for show choir. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 264

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**MUSIC 265 – ENSEMBLE-WOODWIND**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 265

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 266 – BLACK MUSIC ENSEMBLE**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 266

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**MUSIC 267 – ENSEMBLE-BRASS**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 267

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**MUSIC 268 – ENSEMBLE-PERCUSSION**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 268

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 269 – ENSEMBLE-STRING**

1 credit.

Assignments in performing ensemble literature. Audition and instructor consent required for students enrolling the first time

**Requisites:** MUSIC 269

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 270 – ENSEMBLE-GUITAR**

1 credit.

Rehearsal, coaching and preparing guitar literature for performance of duos, trios, and quartets. Audition and instructor consent required for students enrolling the first time. Musicians other than guitarists are permitted to enroll and be incorporated into the ensembles.

**Requisites:** MUSIC 270

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 271 – MUSICA PRACTICA: AURAL SKILLS 3**

1 credit.

Intermediate aural skills instruction.

**Requisites:** MUSIC 122 and concurrent enrollment in MUSIC 221

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 272 – MUSICA PRACTICA: AURAL SKILLS 4**

1 credit.

Intermediate aural skills instruction.

**Requisites:** MUSIC 221 and concurrent enrollment in MUSIC 222

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 297 – SPECIAL TOPICS IN MUSIC**

1-3 credits.

Exploration of wide-ranging topics in music history, music performance, music theory or music education.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**MUSIC/CURRIC 300 – PRINCIPLES OF MUSIC EDUCATION**

2 credits.

Principles of music education, including philosophy, history, and current practices and curricular trends. Survey of music education in and out of schools as situated within diverse, pluralistic communities.

**Requisites:** Declared in Music: Education BM and sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC/CURRIC 301 – MUSIC LEARNING AND TEACHING 1**

2 credits.

The learning and teaching of music at the elementary and middle school levels.

**Requisites:** CURRIC/MUSIC/CURRIC 300 and concurrently enrolled in CURRIC/MUSIC/CURRIC 337 and declared in Music: Education

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC/CURRIC 302 – MUSIC LEARNING AND TEACHING 2**

2 credits.

The learning and teaching of music at the high school level.

**Requisites:** CURRIC/MUSIC/CURRIC 301 and CURRIC/MUSIC/CURRIC 337

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC/CURRIC 303 – FIELDWORK IN MUSIC COMMUNITIES**

1 credit.

Fieldwork in music communities in the Madison area.

**Requisites:** CURRIC/MUSIC/CURRIC 300 or concurrent enrollment

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MUSIC/CURRIC 304 – COMPOSITION, ARRANGEMENT, AND ORCHESTRATION FOR THE MUSIC TEACHER**

2 credits.

Introduction to the teaching of musical composition, arrangement, and orchestration. Special emphasis on how music technologies interact with conceptions of composition, arrangement, and orchestration; implications for music learning and teaching.

**Requisites:** MUS PERF 104**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 305 – POPULAR MUSIC IN THE USA: 1920-1950**

2 credits.

Survey of the works of Gershwin, Rodgers, Kern, Porter, and others; nature of the music; semantics of the lyrics, and popular song as the reflection of a social era.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2016**MUSIC 306 – GREAT COMPOSERS**

3 credits.

Examination of the life, cultural background, and works of a major figure in Western music history.

**Requisites:** MUSIC 101, 105, 106, 201, 205, 206, or FOLKLORE/MUSIC/FOLKLORE 103**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**MUSIC 317 – MUSICAL WOMEN IN EUROPE AND AMERICA: CREATIVITY, PERFORMANCE, AND IDENTITY**

3 credits.

Explores women's musical activities and issues related to them by focusing on composers, performers, and audiences in a wide range of contexts, from Europe in the Medieval Era through 21st-century America; no reading knowledge of music is required.

**Requisites:** Sophomore standing and declared in an Honors program**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2022**MUSIC/AFROAMER/DANCE 318 – CULTURAL CROSS CURRENTS: WEST AFRICAN DANCE/MUSIC IN THE AMERICAS**

3 credits.

The influence of traditional West African dance/music heritage in historical, artistic, social contexts in the development of new hybrid forms of music/dance created by cross-pollination of cultures of Africans, Europeans and indigenous peoples in the New World.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 319 – TOPICS IN MUSIC AND ETHNICITY IN THE UNITED STATES**

3 credits.

Explores music of ethnic groups in the U.S., including that of marginalized minorities, in its cultural context. Topics may include the music of African American, Asian American, Native American and Jewish communities.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUSIC 331 – JAZZ IMPROVISATION**

3 credits.

Theoretical concepts, development of aural skills, and analysis procedures related to the jazz idiom. Audition required.

**Requisites:** Consent of instructor**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 332 – JAZZ IMPROVISATION**

3 credits.

More advanced theoretical concepts, development of aural skills, and analysis procedures related to the jazz idiom.

**Requisites:** MUSIC 331**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**MUSIC/CURRIC 337 – PRACTICUM IN TEACHING MUSIC**

1 credit.

Observation and participation in K-12 music education settings.

**Requisites:** Declared in Music: Education and concurrent enrollment in CURRIC/MUSIC/CURRIC 301 or 302

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 340 – PEDAGOGY**

1-2 credits.

Pedagogical methods for applied music offered on all instruments and voice by appropriate applied staff. Survey of music, methods, and materials.

**Requisites:** MUS PERF 401, 402, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 431, 433, 435, 437, 439, or 440

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC/CURRIC 344 – TEACHING VOCAL STYLES IN THE MUSIC CLASSROOM**

1 credit.

Introduction to the teaching and learning of diverse vocal styles. Special emphasis on what makes each style distinct, as well as the acquisition practices associated with each style.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**MUSIC 345 – PRACTICUM IN STRING PEDAGOGY**

2 credits.

Provides opportunity for advanced undergraduate students to teach privately or in small groups under faculty supervision.

**Requisites:** MUSIC 340

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**MUSIC 346 – REPERTOIRE**

1-2 credits.

A comprehensive study of sources, analysis, and style of repertoire for a particular instrument(s) or voice(s).

**Requisites:** MUS PERF 401, 402, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 431, 433, 435, 437, 439, or 440

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 351 – BASIC CONCEPTS OF MUSIC**

3 credits.

Offers a comprehensive approach to music. Students learn the basic tools of music theory, the basic compositional forms used in music, and a general survey of musical styles.

**Requisites:** MUSIC 151

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**MUSIC/FOLKLORE 402 – MUSICAL CULTURES OF THE WORLD**

3 credits.

Explores the performance, transmission, and consumption of traditional and popular musics outside of the standard Euro-American context. Employs musical-analytic and critical approaches to trace transnational musical circulation.

**Requisites:** MUSIC 212

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**MUSIC 405 – SEMINAR: CULTURAL STUDY OF MUSIC**

3 credits.

Explores various topics in music research from the perspective of contemporary cultural theory and history. Develops skills in critical analysis of music and culture, drawing from literatures in postcolonial studies, critical race theory, studies of empire, colonialism, and capitalism.

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUSIC/CURRIC 409 – STUDENT TEACHING IN GENERAL AND VOCAL MUSIC**

6-12 credits.

Supervised student teaching in general and vocal K-12 settings.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC/CURRIC 410 – STUDENT TEACHING IN GENERAL AND INSTRUMENTAL MUSIC**

6-12 credits.

Supervised student teaching in general and instrumental K-12 settings.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 411 – SURVEY OF MUSIC IN THE MIDDLE AGES**

3 credits.

Major genres and composers of monophonic and polyphonic music, sacred and secular in Western Europe and England (ca. 7th-14th centuries).

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 412 – SURVEY OF MUSIC IN THE RENAISSANCE**

3 credits.

Major genres and composers of sacred and secular music (ca. 15th-16th centuries).

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 413 – SURVEY OF MUSIC IN THE BAROQUE ERA**

3 credits.

Major genres and composers of sacred and secular music in Western Europe (ca. 1600-1750).

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021**MUSIC 414 – SURVEY OF MUSIC IN THE CLASSIC ERA**

3 credits.

Major genres and composers in Western Europe (ca. 1750-1827).

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 415 – SURVEY OF MUSIC IN THE ROMANTIC ERA**

3 credits.

Major genres and composers in Europe (ca. 1820-1910).

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**MUSIC 416 – SURVEY OF MUSIC IN THE TWENTIETH CENTURY**

3 credits.

Major genres and composers in Europe and the United States.

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 419 – MUSIC IN THE UNITED STATES**

3 credits.

Explores a variety of genres within their social and historical contexts including folk songs and ballads, the Native American Pow Wow, New England psalmody, popular song repertoires, musical theater and opera, concert music, blues and jazz.

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music:

Performance graduate program

**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **MUSIC/CURRIC 420 – TEACHING POPULAR INSTRUMENTAL MUSIC 1**

1 credit.

Development of critical perspectives, musical knowledge, and pedagogical skills needed to teach instrumental popular music. This class will focus on popular string instruments, their electronic counterparts, and emerging technologies for the performance and production of popular music.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MUSIC/CURRIC 421 – TEACHING POPULAR INSTRUMENTAL MUSIC 2**

1 credit.

Development of critical perspectives, musical knowledge, and pedagogical skills needed to teach instrumental popular music. This class will focus on popular percussion instruments, their electronic counterparts, and emerging technologies for the performance and production of popular music.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **MUSIC 461 – COLLEGIUM MUSICUM**

1 credit.

Early Music Ensemble specializing in performance of instrumental and vocal early music, using the school's collection of replicas of early instruments. Audition required.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUSIC 463 – ACTING FOR SINGERS**

1 credit.

Acting and stagecraft skills, including text-targeted work, with a focus on the dramatic aspects of the operatic craft. Text work in will involve a step-by-step process designed to facilitate the assimilation of English and foreign-language texts in rehearsal and performance. Work in these areas will be applied to arias and scenes from the operatic and theatrical repertoire.

**Requisites:** MUS PERF 144, 205, 505 or concurrent enrollment in MUS PERF 505, or 705 or concurrent enrollment in MUS PERF 705

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

### **MUSIC 465 – MARCHING BAND TECHNIQUES**

1 credit.

Exploration of methods and materials related to marching band teaching, philosophy, and performance.

**Requisites:** MUSIC 42 or declared in Music, Music: Education, or Music: Performance

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

### **MUSIC 466 – DICTION FOR SINGERS**

2 credits.

Italian, German, and French diction as related to vocal music; transcription into the International Phonetic Alphabet (IPA).

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **MUSIC 467 – LANGUAGE DICTION FOR SINGING I**

2 credits.

English, German, Italian, and French diction as related to vocal music.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **MUSIC 468 – LANGUAGE DICTION FOR SINGING II**

2 credits.

Continuation of English, German, Italian, and French diction as related to vocal music.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **MUSIC 497 – SPECIAL TOPICS IN MUSIC**

1-3 credits.

Exploration of wide-ranging topics in music history, music theory or music education.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 499 – DIRECTED STUDY**

1-3 credits.

Individual research and projects with faculty. Students must have project and instructor assignment approved by department

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 502 – FIGURED BASS AND BASSO CONTINUO**

3 credits.

Study of theory and practice of 17th and 18th-century figured bass and basso continuo realization and performance. Participants develop extemporized and written realizations that emulate the discipline, style traits, and musical vitality suggested in historical sources.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MUSIC 511 – HISTORICAL PERFORMANCE PRACTICES**

3 credits.

Examination of historical evidence for performance practice and its relevance to modern performances of the music of earlier eras.

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**MUSIC 513 – SURVEY OF OPERA**

3 credits.

Historical development of opera; investigation of main stylistic features of representative masterworks.

**Requisites:** MUSIC 212 or declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MUSIC/FOLKLORE 515 – PROSEMINAR IN ETHNOMUSICOLOGY**

3 credits.

Introduction to ethnomusicology, including historical survey of major works in the field, classification of musical instruments, measurement of tuning systems and concepts of scale, mode and rhythm in non-Western music.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MUSIC/FOLKLORE 516 – ETHNOGRAPHIC METHODS FOR MUSIC AND SOUND**

3 credits.

Focuses on the tools (material, methodological, and ethical) for doing ethnographic fieldwork in musical contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 523 – ORCHESTRATION I**

3 credits.

History of orchestration and arranging; study of representative works by means of scores, recordings, and attendance at rehearsals of University organizations; scoring for band, chorus, and orchestra.

**Requisites:** MUSIC 222 or declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 524 – ORCHESTRATION II**

3 credits.

Continuation of study in orchestration and arranging.

**Requisites:** MUSIC 222 or declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**MUSIC 540 – ADVANCED PEDAGOGY**

2 credits.

Advanced pedagogical methods for performance.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**MUSIC 541 – SEMINAR IN CHORAL LITERATURE**

2 credits.

Seminar in Choral Literature from Renaissance to the Present.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MUSIC 542 – CHORAL LITERATURE AND PERFORMANCE PRACTICES OF TODAY**

2 credits.

Seminar in Choral Literature from Renaissance to the Present.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 543 – ADVANCED STRING PEDAGOGY**

2 credits.

Survey of contemporary and historical string pedagogy with implications for multiple teaching settings and applied research.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUSIC 544 – ADVANCED STRING PEDAGOGY**

2 credits.

Survey of contemporary and historical string pedagogy with implications for multiple teaching settings and applied research, with an emphasis on individual projects and applied research.

**Requisites:** MUSIC 543**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 545 – PRACTICUM IN ADVANCED STRING PEDAGOGY**

2 credits.

Provides opportunity for graduate students to teach privately or in small groups under faculty supervision.

**Requisites:** MUSIC 543**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**MUSIC 546 – STRING LITERATURE**

2 credits.

Relationship of string solo, ensemble and orchestral literature to history, style, form, genre, and performance practice. Emphasis on bibliographic sources; research project required.

**Requisites:** Senior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUSIC 548 – PIANO PEDAGOGY II**

3 credits.

Exploration of appropriate materials, standard literature, pedagogical techniques, and structure for the intermediate to advanced student. Research in specialized topics. Includes laboratory observation and teaching.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2015**MUSIC 550 – PERCUSSION LITERATURE**

2 credits.

Examines a select body of Western art music composed for percussion during the twentieth and twenty-first Centuries. Important compositional styles and repertoire will be presented and discussed with an emphasis on historical perspective and compositional technique.

**Requisites:** Senior standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**MUSIC 551 – CLASS PIANO PEDAGOGY**

3 credits.

Techniques for teaching older beginners or adults in class or individual instruction, piano literature sources and references, evaluation of repertoire and analysis of methods and structure.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2021

**MUSIC 553 – ADVANCED CONDUCTING SEMINAR**

2 credits.

Study/analysis of conducting techniques; score reading/interpretation of masterpieces from standard repertoire.

**Requisites:** Declared in Music, Music: Education, or Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 554 – ADVANCED CONDUCTING**

2 credits.

Continuation of study and analysis of conducting techniques and score reading.

**Requisites:** MUSIC 553

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**MUSIC 556 – UNIVERSITY OPERA**

1-2 credits.

Opera role: preparation, rehearsal and performance in University opera production.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 557 – OPERA WORKSHOP**

2 credits.

Performance of scenes from standard operas or of whole operas; singing, accompanying, and dramatic action; instruction in voice projection, posture and movement; problems of staging, lighting, costume and scenery. Audition required.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 558 – MADRIGAL SINGERS**

1 credit.

Ensemble specializing in 16th and 17th century secular music. Audition required.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 559 – GRADUATE CHORAL UNION**

1 credit.

Weekly rehearsals in preparation of public performance of a masterwork for chorus and orchestra at end of semester. Audition required.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 560 – PRACTICUM IN ADVANCED STUDIO TEACHING-PIANO**

1 credit.

Observation and teaching of an advanced undergraduate student under the direct supervision of a studio professor.

**Requisites:** MUSIC 548

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**MUSIC 562 – JAZZ ENSEMBLE**

1 credit.

Assignments in performing ensemble literature. Students enrolling for the first time should contact the School of Music for audition information

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 565 – ADVANCED ENSEMBLE-WOODWIND**

1 credit.

Assignments in performing ensemble literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 567 – ADVANCED ENSEMBLE-BRASS**

1 credit.

Assignments in performing ensemble literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 568 – ADVANCED ENSEMBLE-PERCUSSION**

1 credit.

Assignments in performing ensemble literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 569 – ADVANCED ENSEMBLE-STRING**

1 credit.

Assignments in performing ensemble literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 570 – UNIVERSITY SYMPHONY ORCHESTRA**

1 credit.

Performance plus additional study of performance practice and orchestral literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 571 – CHAMBER ORCHESTRA**

1 credit.

Rehearsal, study of performance of classical symphonic works of 19th and 20th century orchestra and concerto literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**MUSIC 572 – ADVANCED ENSEMBLE-CLASSICAL GUITAR**

1 credit.

Rehearsal, coaching and preparing guitar literature for performance of duos, trios, and quartets. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**MUSIC 573 – CONTEMPORARY CHAMBER ENSEMBLE**

1 credit.

Assignments in performing ensemble literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**MUSIC 574 – WIND ENSEMBLE**

1 credit.

Limited instrumentation for students having attained exceptional level of performance ability. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 576 – CONCERT BAND**

1 credit.

Rehearsal and performance from band literature; additional study of performance practice. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 577 – CHORALE**

1 credit.

Performance and study of choral chamber music. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 578 – CONCERT CHOIR**

1 credit.

Performance plus additional study of performance practice and choir literature. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 579 – MASTERS SINGERS**

1 credit.

A group of select singers who study varied repertoire conducted by graduate students. Students will audition for placement prior to the beginning of the semester

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**MUSIC 591 – ORGAN LITERATURE AND DESIGN**

2 credits.

Survey of organ literature with parallel study of organ design and construction.

**Requisites:** Senior standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**MUSIC/L I S 619 – MUSIC RESEARCH METHODS AND MATERIALS**

3 credits.

Historical and contemporary bibliography resources for musical scholarship; general reference tools of scholarly work and specific musicological works.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 621 – RENAISSANCE POLYPHONY**

3 credits.

Analysis and stylistic composition.

**Requisites:** Senior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 622 – BAROQUE COUNTERPOINT**

3 credits.

Analysis and stylistic composition.

**Requisites:** Senior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MUSIC 623 – FORM AND ANALYSIS**

2-3 credits.

Study of modern analytical techniques; practice in analysis of representative works.

**Requisites:** Senior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUSIC 624 – FORM AND ANALYSIS II**

2-3 credits.

Continuation of study of modern analytical techniques; practice in analysis of representative works.

**Requisites:** Senior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 629 – JAZZ THEORY AND ANALYSIS**

3 credits.

Introduction to contemporary research into jazz theory through analysis of lead sheet jazz compositions, analysis of large ensemble jazz compositions and improvised solos, and critical readings of jazz theory publications.

**Requisites:** Declared in Music MA, Music: Performance DMA, or Music: Performance MM

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MUSIC 632 – GRADUATE INSTRUMENTAL CONDUCTING LABORATORY**

1 credit.

Develop conducting skills through experience leading an ad hoc ensemble of 9-20 musicians in rehearsal and performance on a range of orchestral and wind ensemble repertoire.

**Requisites:** Concurrent enrollment in MUS PERF 532, 732, 990, or 999

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study and research for students in the major writing an honors thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**MUSIC 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study and research for students in the major writing an honors thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**MUSIC 749 – SEMINAR IN VOCAL TECHNIQUES**

2 credits.

Study and analysis of various vocal techniques: pedagogical and historical viewpoints.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 751 – SEMINAR IN PIANO PEDAGOGY**

3 credits.

Interpretive and technical approaches to advanced keyboard performance.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUSIC 752 – PIANO PEDAGOGY WORKSHOP**

1 credit.

Designed to assist the DMA student in piano performance and pedagogy in developing a pedagogical workshop for piano teachers. The project will culminate in a public workshop which may address any approved area of keyboard pedagogy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUSIC 791 – SEMINAR IN PIANO LITERATURE**

3 credits.

Applied piano literature including representative works from all periods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**MUSIC 792 – SEMINAR IN VOCAL LITERATURE**

3 credits.

Comprehensive study of vocal literature including representative works from various periods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**MUSIC 796 – SEMINAR IN DUO SONATA LITERATURE**

3 credits.

Comprehensive study of major works for single instrument and piano with primary focus on interpretive and technical issues for the collaborative musician.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 798 – SEMINAR-INSTRUMENTAL LITERATURE**

2 credits.

Comprehensive study of major works for specific instruments with primary focus on interpretive and technical issues for the advance musician.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 799 – INDEPENDENT WORK**

1-3 credits.

Faculty-mentored individual study and research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 821 – HISTORICAL MUSIC THEORIES 1**

3 credits.

The development of musical concepts and issues in music-theoretical discourse from antiquity through the 17th century.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**MUSIC 822 – HISTORICAL MUSIC THEORIES 2**

3 credits.

The development of musical concepts and issues in music-theoretical discourse from the 17th century through the present.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**MUSIC 823 – SCHENKERIAN ANALYSIS**

3 credits.

Studies in the theoretical concepts and analytical methods of Heinrich Schenker.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**MUSIC 824 – POST-TONAL ANALYSIS**

3 credits.

Studies in the theoretical concepts and analytical methods, including those of Milton Babbitt, Allen Forte, David Lewin, Robert Morris, and others.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**MUSIC 900 – COLLOQUIUM**

0 credits.

Current research topics presented by staff, graduate students, and visiting scholars.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**MUSIC 911 – SEMINAR IN MUSICOLOGY**

3 credits.

Topics in musicology, dealing primarily with an important aspect or genre or music or segment of a stylistic period.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUSIC/FOLKLORE 915 – SEMINAR IN ETHNOMUSICOLOGY**

3 credits.

Topics in ethnomusicology within a cross-cultural framework; melodic typology, scale and tuning systems, mode, rhythm, ornamentation, improvisation techniques, oral and written traditions of composition, notation systems, and function of music society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**MUSIC 921 – CURRENT ISSUES IN MUSICAL THOUGHT 1**

3 credits.

Topics of current theoretical or compositional concern and in-depth discussions of recent publications.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUSIC 923 – SEMINAR IN NOTATION**

3 credits.

Notational systems, their history, interpretation and significance with special reference to development of Western notation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**MUSIC 925 – TOPICS IN MUSIC ANALYSIS 1**

3 credits.

Intensive discussions of particular repertoire or musical problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**MUSIC 926 – TOPICS IN MUSIC ANALYSIS 2**

3 credits.

Intensive discussions of particular repertoire or musical problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015



**MUSIC 927 – SEMINAR IN COMPOSITION**

3 credits.

Topics directly related to composition, including musical forms, contemporary performance practice, electronic music, intermedia.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 990 – MASTERS THESIS**

1-4 credits.

Individual research study with faculty mentor for writing thesis.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUSIC 999 – PHD DISS/DMA PROJECT**

1-3 credits.

Individual research study with faculty mentor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## MUSIC-PERFORMANCE (MUS PERF)

**MUS PERF 21 – BRASS FUNDAMENTALS**

1 credit.

Prepares music educators for teaching brass instruments (horn, trumpet trombone, euphonium, and tuba) in K-12 school settings.

**Requisites:** Declared in Music: Education BM

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUS PERF 22 – STRINGS FUNDAMENTALS**

1 credit.

Prepares music educators for teaching orchestral string instruments (violin, viola, violoncello, and double bass) in K-12 school settings.

**Requisites:** Declared in Music: Education BM

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUS PERF 23 – WOODWIND FUNDAMENTALS**

1 credit.

Prepares music educators for teaching woodwind instruments (flute, clarinet, saxophone, oboe, and bassoon) in K-12 school settings.

**Requisites:** Declared in Music: Education BM

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUS PERF 27 – FUNDAMENTALS-PERCUSSION**

1 credit.

Exploration of the fundamentals of the percussion.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUS PERF 44 – STUDY ABROAD: BEGINNING INSTRUCTION IN MUSIC PERFORMANCE**

1 credit.

Beginning class or private music performance instruction taken in a UW-Madison resident study abroad program. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**MUS PERF 47 – BASIC FLUTE**

1-2 credits.

Individual instruction in flute performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 47

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**MUS PERF 49 – BASIC OBOE**

1-2 credits.

Individual instruction in oboe performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 49

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**MUS PERF 51 – BASIC CLARINET**

1-2 credits.

Individual instruction in clarinet performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 51

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUS PERF 55 – BASIC BASSOON**

1-2 credits.

Individual instruction in bassoon performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 55

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**MUS PERF 57 – BASIC HORN**

1-2 credits.

Individual instruction in horn performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 57

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**MUS PERF 59 – BASIC TRUMPET/CORNET**

1-2 credits.

Individual instruction in trumpet or cornet performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 59**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**MUS PERF 61 – BASIC TROMBONE**

1-2 credits.

Individual instruction in trombone performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 61**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**MUS PERF 63 – BASIC EUPHONIUM**

1-2 credits.

Individual instruction in euphonium performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 63**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**MUS PERF 65 – BASIC TUBA**

1-2 credits.

Individual instruction in tuba performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 65**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 71 – BASIC VIOLIN**

1-2 credits.

Individual instruction in violin performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 71**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**MUS PERF 73 – BASIC VIOLA**

1-2 credits.

Individual instruction in viola performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 73**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2014**MUS PERF 75 – BASIC CELLO**

1-2 credits.

Individual instruction in cello performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 75**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**MUS PERF 76 – BASIC GUITAR**

1-2 credits.

Individual instruction in guitar performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 76**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 77 – BASIC STRING BASS**

1-2 credits.

Individual instruction in string bass performance at the basic level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 77**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 79 – BASIC HARP**

1-2 credits.

Private instruction in harp performance at the introductory level. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 79**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**MUS PERF 101 – BEGINNING CLASS PIANO**

2 credits.

Group instruction in beginning piano.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 102 – BEGINNING CLASS PIANO**

2 credits.

Continuation of group instruction in beginning piano.

**Requisites:** MUS PERF 101 or placement into MUS PERF 102 and declared in Music, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 103 – ELEMENTARY CLASS PIANO**

2 credits.

Group instruction in elementary piano.

**Requisites:** MUS PERF 102 or placement into MUS PERF 103 and declared in Music, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**MUS PERF 104 – INTERMEDIATE CLASS PIANO**

2 credits.

Group instruction in intermediate piano.

**Requisites:** MUS PERF 103 or placement into MUS PERF 104 and declared in Music, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 108 – JAZZ CLASS PIANO**

2 credits.

Development of basic jazz piano skills for solo, accompaniment, and ensemble playing; discussion of the role of the piano in various jazz ensemble formats; introduction to chord symbols, jazz voicings, melodic improvisation, and bass lines; continued development of sound technical skills for the piano. Students will apply these concepts to the performance of lead sheets from the standard jazz repertoire.

**Requisites:** MUS PERF 102 or placement into MUS PERF 103 and declared in Music, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUS PERF 143 – INTRODUCTION TO PERFORMANCE: VOICE**

1 credit.

Voice for the non-music major beginning voice student; basic concepts of vocal technique, tone production, breathing, and diction for singing; basic musicianship; singing in class by the student individually and in small groups.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 144 – VOCAL INSTRUCTION FOR NON-VOICE MAJORS**

1-2 credits.

Vocal instruction for the non-voice major. Basics of classical vocal technique; however, repertoire may include other musical styles, such as musical theater or jazz, as approved by instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 146 – MUSIC LESSONS FOR NON-MAJORS**

1-2 credits.

Private applied music performance instruction for non-music majors and for music majors seeking study on a secondary instrument. Not for keyboard or vocal performance study. Opportunity for study with a faculty member may be limited. Audition is required.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, for 8 number of completions**Last Taught:** Spring 2023**MUS PERF 147 – FIRST YEAR COMPOSITION**

3 credits.

Individual instruction in music composition at the beginning level.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**MUS PERF 148 – FIRST YEAR COMPOSITION**

3 credits.

Continuation of instruction in music composition at the beginning level.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 200 – ELEMENTARY/INTERMEDIATE PIANO FOR NON-PIANO MAJORS**

2 credits.

Individual piano instruction for non-piano majors.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 201 – ELEMENTARY/INTERMEDIATE PIANO**

2-4 credits.

Individual piano instruction for piano majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 202 – ELEMENTARY/INTERMEDIATE HARPSICHORD**

2-4 credits.

Introduction to basic harpsichord technique, continuo realization and intermediate-level repertoire. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 202**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017

**MUS PERF 203 – ELEMENTARY/INTERMEDIATE ORGAN**

2-4 credits.

Individual organ instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 205 – ELEMENTARY/INTERMEDIATE VOICE**

2-4 credits.

Individual voice instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 207 – ELEMENTARY/INTERMEDIATE FLUTE**

2-4 credits.

Individual flute instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 209 – ELEMENTARY/INTERMEDIATE OBOE**

2-4 credits.

Individual oboe instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 211 – ELEMENTARY/INTERMEDIATE CLARINET**

2-4 credits.

Individual clarinet instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 213 – ELEMENTARY/INTERMEDIATE SAXOPHONE**

2-4 credits.

Individual saxophone instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 215 – ELEMENTARY/INTERMEDIATE BASSOON**

2-4 credits.

Individual bassoon instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 217 – ELEMENTARY/INTERMEDIATE HORN**

2-4 credits.

Individual horn instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 219 – ELEMENTARY/INTERMEDIATE TRUMPET**

2-4 credits.

Individual trumpet instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 221 – ELEMENTARY/INTERMEDIATE TROMBONE**

2-4 credits.

Individual trombone instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MUS PERF 223 – ELEMENTARY/INTERMEDIATE EUPHONIUM**

2-4 credits.

Individual euphonium instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**MUS PERF 225 – ELEMENTARY/INTERMEDIATE TUBA**

2-4 credits.

Individual tuba instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MUS PERF 227 – ELEMENTARY/INTERMEDIATE PERCUSSION**

2-4 credits.

Individual percussion instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 231 – ELEMENTARY/INTERMEDIATE VIOLIN**

2-4 credits.

Individual violin instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 233 – ELEMENTARY/INTERMEDIATE VIOLA**

2-4 credits.

Individual viola instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 235 – ELEMENTARY/INTERMEDIATE CELLO**

2-4 credits.

Individual cello instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 237 – ELEMENTARY/INTERMEDIATE DOUBLE BASS**

2-4 credits.

Individual instruction in double bass performance.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 239 – ELEMENTARY/INTERMEDIATE HARP**

2-4 credits.

Individual harp instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 240 – ELEMENTARY/INTERMEDIATE GUITAR**

2-4 credits.

Individual guitar instruction for majors.

**Requisites:** Declared in the undergraduate Music program, Music: Performance BM, or Music: Education BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 241 – ELEMENTARY/INTERMEDIATE JAZZ STUDIO INSTRUCTION**

2-4 credits.

Individual studio instruction in jazz performance.

**Requisites:** Concurrent enrollment in MUSIC 262 and declared in Music, Music: Education BM, or Music: Performance BM**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 8 number of completions**Last Taught:** Spring 2023

**MUS PERF 242 – ACCOMPANYING**

2 credits.

Individual instruction in collaborative musical performance.

**Requisites:** MUS PERF 201 or 203**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**MUS PERF 247 – SECOND YEAR COMPOSITION**

3 credits.

Individual instruction in music composition.

**Requisites:** MUS PERF 148**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUS PERF 248 – SECOND YEAR COMPOSITION**

3 credits.

Continuation of individual instruction in music composition.

**Requisites:** MUS PERF 247**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**MUS PERF 251 – KEYBOARD SKILLS**

2 credits.

Keyboard skills for the piano major.

**Requisites:** Concurrent enrollment in MUS PERF 201 or 203**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUS PERF 311 – ADVANCED TECHNIQUES: CLARINET**

1-2 credits.

Performance study topics as assigned for clarinet.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**MUS PERF 327 – ADVANCED TECHNIQUES: PERCUSSION**

1-2 credits.

Performance study topics as assigned for percussion.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**MUS PERF 331 – ADVANCED TECHNIQUES: VIOLIN**

1-2 credits.

Performance study topics as assigned for violin.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**MUS PERF 333 – ADVANCED TECHNIQUES: VIOLA**

1-2 credits.

Performance study topics as assigned for viola.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2018**MUS PERF 339 – ADVANCED TECHNIQUES: HARP**

1-2 credits.

Performance study topics as assigned for harp.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**MUS PERF 342 – PIANO ACCOMPANYING LAB**

1 credit.

Laboratory in piano accompanying for piano emphasis majors and doctoral minors.

**Requisites:** MUS PERF 201**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 347 – THIRD YEAR COMPOSITION**

3 credits.

Individual instruction in music composition.

**Requisites:** MUS PERF 248**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**MUS PERF 348 – THIRD YEAR COMPOSITION**

3 credits.

Continuation of individual instruction in music composition.

**Requisites:** MUS PERF 347**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**MUS PERF 401 – ADVANCED PIANO**

2-4 credits.

Individual piano instruction for undergrad piano majors and doctoral minors. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 401**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 402 – ADVANCED HARPSICHORD**

2-4 credits.

Upper-level harpsichord study of advanced repertoire and basso continuo; for harpsichordists who have mastery of basic technique and repertoire. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 402**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 403 – ADVANCED ORGAN**

2-4 credits.

Advanced individual organ instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 403**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 405 – ADVANCED VOICE**

2-4 credits.

Advanced individual voice instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 405**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 407 – ADVANCED FLUTE**

2-4 credits.

Advanced individual flute instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 407**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 409 – ADVANCED OBOE**

2-4 credits.

Advanced individual oboe instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 409**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 411 – ADVANCED CLARINET**

2-4 credits.

Advanced individual clarinet instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 411**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 413 – ADVANCED SAXOPHONE**

2-4 credits.

Advanced individual saxophone instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 413**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 415 – ADVANCED BASSOON**

2-4 credits.

Advanced individual bassoon instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 415**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 417 – ADVANCED HORN**

2-4 credits.

Advanced individual horn instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 417**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**MUS PERF 419 – ADVANCED TRUMPET**

2-4 credits.

Advanced individual trumpet instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 419

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 421 – ADVANCED TROMBONE**

2-4 credits.

Advanced individual trombone instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 421

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 423 – ADVANCED EUPHONIUM**

2-4 credits.

Advanced individual instruction in euphonium. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 423

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 425 – ADVANCED TUBA**

2-4 credits.

Advanced individual tuba instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 425

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 427 – ADVANCED PERCUSSION**

2-4 credits.

Advanced individual percussion instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 427

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 431 – ADVANCED VIOLIN**

2-4 credits.

Advanced individual violin instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 431

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 433 – ADVANCED VIOLA**

2-4 credits.

Advanced individual viola instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 433

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 435 – ADVANCED CELLO**

2-4 credits.

Advanced individual cello instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 435

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 437 – ADVANCED DOUBLE BASS**

2-4 credits.

Advanced instruction in double bass performance.

**Requisites:** MUS PERF 437

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 439 – ADVANCED HARP**

2-4 credits.

Advanced individual harp instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 439

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**MUS PERF 440 – ADVANCED GUITAR**

2-4 credits.

Advanced individual classical guitar instruction. Instructor consent is required for students enrolling for the first time.

**Requisites:** MUS PERF 440

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**MUS PERF 441 – ADVANCED JAZZ STUDIO INSTRUCTION**

2-4 credits.

Individual applied music performance instruction in jazz.

**Requisites:** MUS PERF 441 and concurrent enrollment in MUSIC 262.

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 8 number of completions

**Last Taught:** Spring 2023

**MUS PERF 447 – FOURTH YEAR COMPOSITION**

3 credits.

Advanced individual instruction in music composition.

**Requisites:** MUS PERF 348

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**MUS PERF 448 – FOURTH YEAR COMPOSITION**

3 credits.

Continuation of advanced individual instruction in music composition.

**Requisites:** MUS PERF 447

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUS PERF 457 – JAZZ COMPOSITION AND ARRANGING**

3 credits.

Study of music composition and arranging in the jazz idiom. Requires audition.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MUS PERF 458 – JAZZ COMPOSITION AND ARRANGING**

3 credits.

Continuation of music composition and arranging in the jazz idiom.

**Requisites:** MUS PERF 457

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**MUS PERF 499 – SENIOR RECITAL**

2 credits.

Preparation and public performance of a senior-level recital.

**Requisites:** 6 credits from: MUS PERF 401, 402, 403, 405, 407, 409, 411, 413, 415, 417, 419, 421, 423, 425, 427, 431, 433, 435, 437, 439, or 440

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**MUS PERF 501 – MASTERS LEVEL-PIANO**

4 credits.

Masters level individual piano instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**MUS PERF 505 – MASTERS LEVEL-VOICE**

4 credits.

Masters level individual voice instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 507 – MASTERS LEVEL-FLUTE**

4 credits.

Masters level individual flute instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 509 – MASTERS LEVEL-OBOE**

4 credits.

Masters level individual oboe instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **MUS PERF 511 – MASTERS LEVEL-CLARINET**

4 credits.

Masters level individual clarinet instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 513 – MASTERS LEVEL-SAXOPHONE**

4 credits.

Masters level individual saxophone instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 515 – MASTERS LEVEL-BASSOON**

4 credits.

Masters level individual bassoon instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

### **MUS PERF 517 – MASTERS LEVEL-HORN**

4 credits.

Masters level individual horn instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 519 – MASTERS LEVEL-TRUMPET**

4 credits.

Masters level individual trumpet instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 521 – MASTERS LEVEL-TROMBONE**

4 credits.

Masters level individual trombone instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 523 – MASTERS LEVEL-EUPHONIUM**

4 credits.

Masters level individual euphonium instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **MUS PERF 525 – MASTERS LEVEL-TUBA**

4 credits.

Masters level individual tuba instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 527 – MASTERS LEVEL-PERCUSSION**

4 credits.

Masters level individual percussion instruction.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**MUS PERF 531 – MASTERS LEVEL-VIOLIN**

4 credits.

Masters level individual violin instruction.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 532 – ADVANCED CONDUCTING**

3-4 credits.

Masters level individual conducting instruction.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 533 – MASTERS LEVEL-VIOLA**

4 credits.

Masters level individual viola instruction.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 535 – MASTERS LEVEL-CELLO**

4 credits.

Masters level individual cello instruction.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 537 – MASTER'S LEVEL DOUBLE BASS**

4 credits.

Individual instruction in double bass at the Master's level.

**Requisites:** Declared in Music: Performance MM**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**MUS PERF 539 – MASTER'S LEVEL HARP**

4 credits.

Individual instruction in harp at the Master's level.

**Requisites:** Declared in Music: Performance MM**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**MUS PERF 540 – MASTERS LEVEL-GUITAR**

4 credits.

Masters level individual classical guitar instruction.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**MUS PERF 542 – ADVANCED ACCOMPANYING**

2-3 credits.

Individual instruction in advanced level collaborative musical performance.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 547 – MASTERS LEVEL COMPOSITION**

3 credits.

Private composition at the master's degree level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**MUS PERF 548 – MASTERS LEVEL COMPOSITION**

3 credits.

Private composition at the master's degree level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**MUS PERF 561 – ORGAN IMPROVISATION AND LITURGY**

2 credits.

Development of organ improvisation skills; survey of liturgical practices and styles.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**MUS PERF 562 – ORGAN IMPROVISATION AND LITURGY**

2 credits.

Continued development of organ improvisation skills.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

### **MUS PERF 701 – DOCTORAL LEVEL-PIANO**

4 credits.

Individual piano instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 703 – DOCTORAL LEVEL-ORGAN**

4 credits.

Individual organ instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **MUS PERF 705 – DOCTORAL LEVEL-VOICE**

4 credits.

Individual voice instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 707 – DOCTORAL LEVEL-FLUTE**

4 credits.

Individual flute instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 709 – DOCTORAL LEVEL-OBOE**

4 credits.

Individual oboe instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 711 – DOCTORAL LEVEL-CLARINET**

4 credits.

Individual clarinet instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 713 – DOCTORAL LEVEL-SAXOPHONE**

4 credits.

Individual saxophone instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 715 – DOCTORAL LEVEL-BASSOON**

4 credits.

Individual bassoon instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 717 – DOCTORAL LEVEL-HORN**

4 credits.

Individual horn instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **MUS PERF 719 – DOCTORAL LEVEL-TRUMPET**

4 credits.

Individual trumpet instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 721 – DOCTORAL LEVEL-TROMBONE**

4 credits.

Individual trombone instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **MUS PERF 725 – DOCTORAL LEVEL TUBA**

4 credits.

Individual tuba instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**MUS PERF 727 – DOCTORAL LEVEL PERCUSSION**

4 credits.

Individual percussion instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 731 – DOCTORAL LEVEL-VIOLIN**

4 credits.

Individual violin instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 732 – DOCTORAL LEVEL CONDUCTING**

2 credits.

Individual conducting instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 733 – DOCTORAL LEVEL-VIOLA**

4 credits.

Individual viola instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 735 – DOCTORAL LEVEL-CELLO**

4 credits.

Individual cello instruction at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 737 – DOCTORAL LEVEL DOUBLE BASS**

4 credits.

Individual instruction in double bass at the doctoral level.

**Requisites:** Declared in Music: Performance DMA**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 740 – DOCTORAL LEVEL-GUITAR**

4 credits.

Individual guitar instruction at the doctoral level.

**Requisites:** Declared in Music: Performance, DMA and concurrent enrollment in MUSIC 572**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**MUS PERF 742 – DOCTORAL LEVEL PRIVATE INSTRUCTION IN ACCOMPANYING**

2 credits.

Extensive, in-depth study of the collaborative piano repertoire, focusing primarily on works for single instruments and voice with piano at the doctoral level.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 747 – DOCTORAL LEVEL COMPOSITION**

3 credits.

Doctoral level composition.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 748 – DOCTORAL LEVEL COMPOSITION**

3 credits.

Doctoral level composition.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**MUS PERF 990 – MASTERS RECITAL**

1-4 credits.

Preparation and public performance of a Masters Recital.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**MUS PERF 999 – DMA RECITAL**

1 credit.

Preparation and public performance of a Doctoral Recital that comprises a portion of the degree requirements for all Doctor of Musical Arts degrees.

**Requisites:** Declared in Music: Performance graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## NAVAL SCIENCE (NAV SCI)

### NAV SCI 101 – INTRODUCTION TO NAVAL SCIENCE

2 credits.

Introduction to the naval profession emphasizing the missions, organization, and components of the Navy and Marine Corps. Topics include terminology, military justice, job specialties, seapower, and naval leadership. Includes lab. Intended for first year Naval ROTC students.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### NAV SCI 102 – SEAPOWER-MARITIME AFFAIRS

3 credits.

Historical survey of the U.S. Navy and American concepts of seapower from 1775 to the present. Includes the evolution of maritime strategy in support of U.S. National Strategy. Current issues in maritime affairs. Includes lab. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### NAV SCI 175 – INTRODUCTORY NAVAL LABORATORY I

0-1 credits.

Laboratory class covering officer education in naval orientation and other topics dealing with the professional development of future naval officers. Intended for freshman NROTC students.

**Requisites:** Enrolled in Naval ROTC program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### NAV SCI 176 – INTRODUCTORY NAVAL LABORATORY II

0-1 credits.

Laboratory class covering officer education in naval sea power and other topics dealing with the professional development of future naval officers. Intended for freshman NROTC students.

**Requisites:** Enrolled in Naval ROTC program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### NAV SCI 201 – NAVAL LEADERSHIP AND MANAGEMENT

3 credits.

A study of organizational behavior and management within the context of the naval organization. Topics include a survey of managerial functions and a study of behavioral aspects of organizations with emphasis on motivation and leadership. Includes lab. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### NAV SCI 202 – NAVIGATION

3 credits.

Introduction to concepts and techniques used to navigate U.S. Navy and civilian ships. Charts and publications, compasses, tides and currents, dead reckoning, piloting, celestial and electronic navigation; day's work in navigation and Nautical Rules of the Road. Includes lab. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### NAV SCI 275 – ELEMENTARY NAVAL LABORATORY I

0-1 credits.

Laboratory class covering officer education in naval engineering and other topics dealing with the professional development of future naval officers. Intended for sophomore NROTC students.

**Requisites:** Enrolled in Naval ROTC program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### NAV SCI 276 – ELEMENTARY NAVAL LABORATORY II

0-1 credits.

Laboratory class covering officer education in naval weapons and other topics dealing with the professional development of future naval officers. Intended for sophomore NROTC students.

**Requisites:** Enrolled in Naval ROTC program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### NAV SCI 301 – NAVAL ENGINEERING

3 credits.

The basic principles and components of ship propulsion systems including steam, diesel, gas turbine, and nuclear power plants. Other topics include ship construction, buoyancy and stability, damage control, electrical distribution, and air conditioning/ refrigeration. Includes lab. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NAV SCI 302 – NAVAL WEAPONS**

3 credits.

Introduction to the properties and behavior of electronic, electromagnetic, and mechanical systems used in naval weapons systems. Topics and concepts include wide range of academic disciplines, all of which are applied to the maritime uses of radar, sonar, communications, electro-optics, computers, missile, and electronic warfare systems. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**NAV SCI 350 – FUNDAMENTALS OF MANEUVER WARFARE**

3 credits.

History of maneuver warfare and the development of the concepts, principles, and doctrine of military operations through study of selected examples from modern history. Open to non-ROTC students on a space available basis, with consent of instructor

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**NAV SCI 351 – LAND CAMPAIGNS**

3 credits.

Evolution of weapons, strategy, tactics and material; the classic principles of war by study of selected battles and campaigns; survey of military and foreign policy, basic strategic concepts, and principles of warfare. Includes lab. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**NAV SCI 375 – INTERMEDIATE NAVAL LABORATORY I**

0-1 credits.

Laboratory class covering officer education in naval navigation and other topics dealing with the professional development of future naval officers. Intended for junior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Fall 2022**NAV SCI 376 – INTERMEDIATE NAVAL LABORATORY II**

0-1 credits.

Laboratory class covering officer education in naval operations and other topics dealing with the professional development of future naval officers. Intended for junior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Spring 2023**NAV SCI 401 – NAVAL OPERATIONS**

3 credits.

In depth study of the professional and efficient operation of U.S. Navy ships. Fleet communications, tactical employment, relative motion plotting, seamanship, and a lecture series on Joint Warfare and the Employment of Naval Forces as an element of National Security Strategy. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**NAV SCI 402 – NAVAL LEADERSHIP AND ETHICS**

3 credits.

Capstone course. Integrates an exploration of Western moral traditions and ethical philosophy with military leadership, professional ethics, and the Uniform Code of Military Justice. Includes lab. Intended for Senior NROTC students. Open to non-ROTC students on a space available basis, with consent of instructor.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**NAV SCI 475 – ADVANCED NAVAL LABORATORY I**

0-1 credits.

Laboratory class covering officer education in naval management and other topics dealing with the professional development of future naval officers. Intended for senior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Fall 2022**NAV SCI 476 – ADVANCED NAVAL LABORATORY II**

0-1 credits.

Laboratory class covering officer education in naval leadership and other topics dealing with the professional development of future naval officers. Intended for senior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Spring 2023

**NAV SCI 575 – PROFESSIONAL NAVAL LABORATORY I**

0-1 credits.

Laboratory class covering officer education in naval orientation and other topics dealing with the professional development of future naval officers. Intended for senior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Fall 2022**NAV SCI 576 – PROFESSIONAL NAVAL LABORATORY II**

0-1 credits.

Laboratory class covering officer education in naval orientation and other topics dealing with the professional development of future naval officers. Intended for senior NROTC students.

**Requisites:** Enrolled in Naval ROTC program**Repeatable for Credit:** No**Last Taught:** Spring 2021

## NEUROLOGICAL SURGERY (NEURSURG)

**NEURSURG 699 – NEUROSURGERY: DIRECTED IN STUDY IN RESEARCH**

1-3 credits.

Offers undergraduates majoring in an area of the biological sciences, and interested in preparing for advanced coursework in graduate or medical school, an opportunity to participate in neurological surgery research.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**NEURSURG 919 – INDIVIDUALIZED NEUROLOGICAL SURGERY ELECTIVE**

2-4 credits.

Individually scheduled clinical elective, directly supervised by Neurological Surgery senior residents and attending physicians. Regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, participating in sub-specialty clinics, presenting cases and teaching topics, and discussing patient cases. Independent activities include reading about patient conditions and preparing for direct patient care as needed. Other patient care-related learning activities as assigned by instructors, dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**NEURSURG 921 – INPATIENT NEURO ICU ELECTIVE**

1-12 credits.

Direct supervision by Neurocritical Care attending physicians. Regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, observing procedures in the unit, presenting cases and teaching topics, and discussing patient cases. Independent activities, including reading about patient conditions and preparing for direct patient care, as needed. Other patient care related learning activities as assigned by instructors: these are dependent on the individual student and the patients under the student's care.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

## NEUROLOGY (NEUROL)

**NEUROL 699 – DIRECTED RESEARCH IN NEUROLOGY**

1-3 credits.

Offers the undergraduate student majoring in the life sciences (including biology, chemistry psychology, or related fields) and with interest in preparing for advanced coursework in graduate or medical school, an opportunity to participate in basic and translation research in neuroscience and neurological disorders.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**NEUROL/NTP 735 – NEUROBIOLOGY OF DISEASE**

2 credits.

Seminar course relating major categories of human neurological and ophthalmological disease to fundamental topics in neurobiology.

**Requisites:** Graduate/professional standing and NEURODPT/NTP/NEURODPT 610**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**NEUROL 910 – INDEPENDENT READING AND RESEARCH FOR FOURTH YEAR MEDICAL STUDENTS**

1-12 credits.

Independent research under the direct supervision of Neurology faculty. Each project is individualized to meet the research goals of the student within the context of the faculty's research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**NEUROL 913 – COGNITION AND NEUROANATOMY**

2 credits.

Basic science concepts will be integrated to examine the relationship between neuroanatomy and cognition (e.g., learning and memory, executive function, visual perceptual abilities, etc.). Utilize stroke, epilepsy, dementia and other neurodegenerative disorders from clinical practice to demonstrate the connection between brain structure and cognitive function. Hands on experience in neuropsychological test administration and interpretation will be integrated into learning. Brain imaging correlates for clinical cases will be presented by a clinical neurologist.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NEUROL 914 – NEUROLOGY, DIET & NEUROLOGICAL DISORDERS**

2 credits.

Gain insight into the role of diet and nutrition in neurological disease while utilizing analytical and evidence-based-medicine research skills. Gain understanding of the role of diet and nutrition in the exacerbation and the treatment of neurological disorders (e.g. Epilepsy, Autism, Fragile X Syndrome, Phenylketonuria (PKU), Multiple Sclerosis).

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NEUROL 919 – NEUROLOGY INDIVIDUALIZED CLINICAL ELECTIVE**

1-12 credits.

Individually scheduled clinical elective, directly supervised by Neurology senior residents and attending physicians. Regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, observing procedures in the unit or clinic, examination of patients in an ambulatory setting, presenting cases and teaching topics, and discussing patient cases. Independent activities, including reading about patient conditions and preparing for direct patient care, as needed. Other patient care related learning activities as assigned by instructors: these are dependent on the individual student and the patients under the student's care.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**NEUROL 990 – RESEARCH SPECIAL NEUROLOGICAL FIELDS**

1-12 credits.

Independent research under the direct supervision of Neurology faculty. Each student's project is individualized to meet the research goals of the student within the context of the faculty's research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2015**NEUROSCIENCE  
(NEURODPT)****NEURODPT/NTP 610 – CELLULAR AND MOLECULAR NEUROSCIENCE**

4 credits.

Study of original papers leading to an understanding of the molecular basis of electrical activity in neurons. Topics include voltage-sensitive currents, molecular biology of neuronal receptors, synaptic transmission and sensory transduction.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 and (PHYSICS 202, 208, or 248), or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**NEURODPT/NTP/PSYCH 611 – SYSTEMS NEUROSCIENCE**

4 credits.

Introduction to the anatomy and physiology of the mammalian nervous system. Lectures will cover the neuroanatomy of the major subdivisions of the human brain, the major sensory and motor systems, and higher order functions. Lab/discussion sections will emphasize readings from the primary literature and hands-on dissections.

**Requisites:** NTP/NEURODPT/NTP 610 or graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**NEURODPT/NTP/ZOOLOGY 616 – LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR**

4 credits.

Independent experimental modules exploring neurophysiology and behavior will be completed in groups. Learn techniques and develop investigations into three separate areas of neurobiology.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 and PSYCH 454**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017



**NEURODPT/NTP 629 – MOLECULAR AND CELLULAR MECHANISMS OF MEMORY**

3 credits.

Focuses on the cell signaling and the resulting structural changes that occur at neuronal synapses during memory formation. The aim is to understand how the synaptic changes underlying memory occur.

**Requisites:** Graduate/professional standing or ANAT&PHY 335, 435, PHYSIOL 335, 435 or PSYCH/ZOOLOGY/PSYCH 523

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NEURODPT/PSYCH/ZOOLOGY 674 – BEHAVIORAL NEUROENDOCRINOLOGY SEMINAR**

2 credits.

Behavior results from a complex interplay among hormones, the brain, and environmental factors. Behaviors and their underlying neural substrates have evolved in response to specific environmental conditions, resulting in vast species diversity in behavioral and neuroendocrine solutions to environmental problems. Designed to explore the primary literature on the neuroendocrine underpinnings of behavior spanning from feeding to sex differences in complex social behaviors. A range of taxonomic groups will be discussed, including (but not limited to) mammals, birds, and fish.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**NEURODPT 675 – SELECTED TOPICS IN PHYSIOLOGY**

1-3 credits.

Topics include: advanced cardiovascular physiology, advanced respiratory physiology, advanced endocrinology, membrane transport physiology and neurobiology.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**NEURODPT 699 – DIRECTED STUDY**

1-4 credits.

Independent work.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NEURODPT 747 – SENSORY AND MOTOR SYSTEMS**

2 credits.

Overview of the basic science principles of sensory and motor systems in the central and peripheral nervous system, with clinicians providing complementary presentations on their relevant experiences in the clinic. Topics include Somatosensory pathways in spinal cord, brainstem and cerebrum, Motor neurons in spinal cord and brainstem and the descending systems that control them, Blood Supply of the CNS and affiliated vascular syndromes, Cerebellum, Basal Ganglia and associated pathways, Eye Movement control, Vestibular, Auditory, and Visual systems and organization of Cerebral Cortex.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NEURODPT/NTP/ZOOLOGY 765 – DEVELOPMENTAL NEUROSCIENCE**

3 credits.

Analysis of neural development with emphasis on experimental approaches. Combination of lectures and discussions of primary literature. Topics include neural induction, patterning, mechanisms of axon guidance, neural crest cell migration and differentiation, cortical development, and synapse formation and elimination.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NEURODPT 990 – RESEARCH AND THESIS**

1-9 credits.

Research supervised by individual faculty members.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



# NEUROSCIENCE TRAINING PROGRAM (NTP)

## NTP/NEURODPT 610 – CELLULAR AND MOLECULAR NEUROSCIENCE

4 credits.

Study of original papers leading to an understanding of the molecular basis of electrical activity in neurons. Topics include voltage-sensitive currents, molecular biology of neuronal receptors, synaptic transmission and sensory transduction.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 and (PHYSICS 202, 208, or 248), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## NTP/NEURODPT/PSYCH 611 – SYSTEMS NEUROSCIENCE

4 credits.

Introduction to the anatomy and physiology of the mammalian nervous system. Lectures will cover the neuroanatomy of the major subdivisions of the human brain, the major sensory and motor systems, and higher order functions. Lab/discussion sections will emphasize readings from the primary literature and hands-on dissections.

**Requisites:** NTP/NEURODPT/NTP 610 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## NTP/NEURODPT/ZOOLOGY 616 – LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR

4 credits.

Independent experimental modules exploring neurophysiology and behavior will be completed in groups. Learn techniques and develop investigations into three separate areas of neurobiology.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 and PSYCH 454

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

## NTP/ANTHRO/PSYCH/ZOOLOGY 619 – BIOLOGY OF MIND

3 credits.

Origins and structures of mind, brain, and consciousness. Transitions from early mammalian through primate to hominid intelligence. Genetics and plasticity in brain development. Modern studies of human brain mechanisms and consciousness.

**Requisites:** Junior standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

## NTP/ZOOLOGY 620 – NEUROETHOLOGY SEMINAR

2 credits.

A group discussion of primary literature articles relevant to the neural basis of behavior with a purpose to understand the neural basis of behavior in animals, to learn to read papers critically and improve discussion leading skills.

**Requisites:** ZOOLOGY/PSYCH/ZOOLOGY 523 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## NTP/NEURODPT 629 – MOLECULAR AND CELLULAR MECHANISMS OF MEMORY

3 credits.

Focuses on the cell signaling and the resulting structural changes that occur at neuronal synapses during memory formation. The aim is to understand how the synaptic changes underlying memory occur.

**Requisites:** Graduate/professional standing or ANAT&PHY 335, 435, PHYSIOL 335, 435 or PSYCH/ZOOLOGY/PSYCH 523

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NTP 632 – NEUROSCIENCE OF PSYCHEDELICS**

3 credits.

Explore the mechanisms of action of classical psychedelics in the brain, including their effects on the neural basis of perception, cognition, and consciousness, and how these actions underlie their success as pharmacological adjuncts for treating psychiatric disorders such as depression, anxiety, and substance use disorder.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 or NEURODPT/NTP/PSYCH/NEURODPT/NTP 611

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NTP/MED PHYS 651 – METHODS FOR NEUROIMAGING RESEARCH**

3 credits.

Provides a practical foundation for neuroimaging research studies with statistical image analysis. Specific imaging methods include functional BOLD MRI, structural MRI morphometry, and diffusion tensor imaging. Lectures and associated in-class computer exercises will cover the physics and methods of image acquisition, steps and tools for image analyses, the basis for statistical image analyses and interpretation of the results.

**Requisites:** Graduate/professional standing or (PHYSICS 104, 202 or 208)

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NTP 660 – NEUROSCIENCE & PUBLIC POLICY SEMINAR**

1-2 credits.

Covers various topics in neuroscience and in the related sciences that demonstrate the interaction between science and public policy.

**Requisites:** BIOCORE 485, PSYCH/ZOOLOGY/PSYCH 523, NEURODPT/NTP/PSYCH/NEURODPT/NTP 611, or declared in Neuroscience graduate program

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NTP 666 – NEUROSCIENCE OF CONSCIOUSNESS AND ITS DISORDERS**

3 credits.

Outlines contemporary strategies to study consciousness and current knowledge of the neural correlates of consciousness and their alterations during sleep, parasomnia, anesthesia, coma, stroke, seizures, meditative and psychedelic states. Reviews recent work studying the neural correlates of conscious contents and their interactions with cognitive processes. Outlines contemporary theories of consciousness, illustrate how they can be empirically tested, and discuss their implications for the presence vs. absence of consciousness in artificial intelligent systems.

**Requisites:** (PSYCH 454 and PSYCH/ZOOLOGY/PSYCH 523) or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NTP 670 – STEM CELLS AND THE CENTRAL NERVOUS SYSTEM**

2-3 credits.

Among the topics that will be included in the course are: embryonic stem cells, adult stem cells, and the transplantation of embryonic and adult stem cell to the developing and adult CNS for experimental and therapeutic purposes.

**Requisites:** BIOCHEM 501 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**NTP 675 – SPECIAL TOPICS**

1-3 credits.

**Requisites:** None

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

### **NTP 677 – BASIC SLEEP MECHANISMS AND SLEEP DISORDERS: FROM NEUROBIOLOGY TO SLEEP MEDICINE**

3 credits.

Sleep occupies a third of our life, is found in all animal species carefully studied so far, and loss of sleep has both acute and long-term negative consequences on the brain and the body. Still, why we sleep remains unclear, and hypotheses on the role of sleep for synaptic homeostasis, learning and memory are being tested. Lectures will focus on the neurobiology of sleep, with detailed review of the brain structures involved in controlling wake and sleep, as well as the circadian and homeostatic regulation of sleep. Other topics will include changes in sleep need with age, animal models to study sleep, sleep disorders, and genetics of sleep.

**Requisites:** PSYCH 454 and PSYCH/ZOOLOGY/PSYCH 523; or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NTP 700 – PROFESSIONAL DEVELOPMENT FOR BIOMEDICAL GRADUATE STUDENTS**

1 credit.

Provides graduate students with the skills and knowledge necessary to succeed in science. Topics which are covered include choosing a thesis advisor, grant writing, preparing a seminar presentation, etc.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NTP 701 – EXPERIMENTAL DESIGN AND STATISTICAL METHODOLOGY**

1 credit.

Application of the scientific method and experimental design, with a focus on experimental neuroscience. Topics include best practices that underlie robust and unbiased experimental approaches, methods, analyses, data interpretation and transparent reporting of results.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **NTP/NEUROL 735 – NEUROBIOLOGY OF DISEASE**

2 credits.

Seminar course relating major categories of human neurological and ophthalmological disease to fundamental topics in neurobiology.

**Requisites:** Graduate/professional standing and NEURODPT/NTP/NEURODPT 610

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **NTP/NEURODPT/ZOOLOGY 765 – DEVELOPMENTAL NEUROSCIENCE**

3 credits.

Analysis of neural development with emphasis on experimental approaches. Combination of lectures and discussions of primary literature. Topics include neural induction, patterning, mechanisms of axon guidance, neural crest cell migration and differentiation, cortical development, and synapse formation and elimination.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **NTP 900 – NEUROSCIENCE SEMINAR: CURRENT TOPICS IN NEUROBIOLOGY**

1 credit.

Critical review of selected topics in neurobiology.

**Requisites:** Declared in Neuroscience graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NTP 990 – RESEARCH AND THESIS**

1-12 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **NUCLEAR ENGINEERING (NE)**

### **NE 1 – COOPERATIVE EDUCATION PROGRAM**

1 credit.

Work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career.

**Requisites:** Sophomore standing

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **NE 231 – INTRODUCTION TO NUCLEAR ENGINEERING**

3 credits.

Nuclear fission/fusion, medical applications of radiation, radiation safety. Socio-economic topics including environmental justice, community engagement, nuclear policy. Brief history of and controversies in nuclear engineering. Career paths and ethics in engineering, and introduction to professional communication.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 234 – PRINCIPLES AND PRACTICE OF NUCLEAR REACTOR OPERATIONS**

4 credits.

Presents the theoretical and practical information required to understand operation of nuclear reactors. Content includes all subjects which must be known by a person seeking an operating license for the university reactor. Instructors integrate information on similar operations and systems in a nuclear power plant.

**Requisites:** Declared in Nuclear Engineering

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**N E 305 – FUNDAMENTALS OF NUCLEAR ENGINEERING**

3 credits.

Properties of nuclei, nuclear structure, radioactivity, nuclear reactions, fission, resonance reactions, moderation of neutrons.

**Requisites:** PHYSICS 205, 241, 244, or 249, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 405 – NUCLEAR REACTOR THEORY**

3 credits.

The neutronics behavior of fission reactors, primarily from a theoretical, one-speed perspective. Criticality, fission product poisoning, reactivity control, reactor stability and introductory concepts in fuel management, followed by slowing down and one-speed diffusion theory.

**Requisites:** N E 305 and (MATH 319, 320, 321, or 375), or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 406 – NUCLEAR REACTOR ANALYSIS**

3 credits.

The neutronics behavior of fission reactors, both from a theoretical and computational multi-group perspective. Multi-group diffusion theory, finite-difference and nodal methods, core heterogeneous effects, pin power reconstruction, thermal neutron spectra, fine group whole spectrum calculations and coarse group constant generation.

**Requisites:** N E 405, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**N E 408 – IONIZING RADIATION**

3 credits.

Sources, interactions, and detection of ionizing radiation. Biological effects, shielding, standards of radiation protection.

**Requisites:** N E 305, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 411 – NUCLEAR REACTOR ENGINEERING**

3 credits.

Reactor heat generation and removal; steady- and unsteady-state conduction in reactor elements; single phase, two-phase, and liquid metal cooling, core thermal design.

**Requisites:** N E 305, M E 361, and (M E 363 and M E 364 or B M E/ CBE 320) or graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 412 – NUCLEAR REACTOR DESIGN**

5 credits.

Reactor design projects, reactor hazards, economics.

**Requisites:** N E 405 and (E P 271 or COMP SCI 300, 302, or 310), or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E/M S & E 423 – NUCLEAR ENGINEERING MATERIALS**

3 credits.

Fundamentals of fuel and cladding behavior in terms of thermal properties, chemical behavior and radiation damage.

**Requisites:** M S & E 350 or 351, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 424 – NUCLEAR MATERIALS LABORATORY**

1 credit.

Practical application of materials issues for nuclear systems including welding, non-destructive examination, optical microscopy, electron microscopy, to understand radiation damage and corrosion.

**Requisites:** M S & E 350 or 351, graduate/professional standing, or member of Engineering Guest Students

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 427 – NUCLEAR INSTRUMENTATION LABORATORY**

2 credits.

Experiments on nuclear instrumentation, counting, data analysis.

**Requisites:** N E 305 or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**N E 428 – NUCLEAR REACTOR LABORATORY**

2 credits.

Experiments on reactor operation, flux measurement, measurements of reactor parameters, using pool type reactor.

**Requisites:** NE 405 and NE 427, or graduate/professional standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**N E/M S & E 433 – PRINCIPLES OF CORROSION**

3 credits.

Thermodynamics and kinetics of metallic corrosion. The common forms of corrosion and corrosion susceptibility tests. Electrochemical measurement of corrosion rates. Corrosion prevention, economic considerations. High temperature oxidation and sulphidation. Corrosion case histories.

**Requisites:** M S & E 330, or graduate/professional standing, or member of Engineering Guest Students**Repeatable for Credit:** No**Last Taught:** Fall 2022**N E/CIV ENGR/I SY E 460 – UNCERTAINTY ANALYSIS FOR ENGINEERS**

3 credits.

Introduction to approaches for quantifying uncertainty in engineering analyses. Both analytical and computational methods are demonstrated.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students**Repeatable for Credit:** No**N E 489 – HONORS IN RESEARCH**

1-3 credits.

Undergraduate research and senior honors thesis in nuclear engineering.

**Requisites:** Declared in Nuclear Engineering Honors in Undergraduate Research program**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2014**N E/MED PHYS 506 – MONTE CARLO RADIATION TRANSPORT**

3 credits.

Use of Monte Carlo technique for applications in nuclear engineering and medical physics. Major theory of Monte Carlo neutral particle transport is discussed. Standard Monte Carlo transport software is used for exercises and projects. Major emphasis is on analysis of real-world problems.

**Requisites:** N E 305 and (N E 405, N E 408, BME/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501 or MED PHYS/N E/MED PHYS 569) or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**N E/M E 520 – TWO-PHASE FLOW AND HEAT TRANSFER**

3 credits.

Two-phase flow and heat transfer in engineering systems. Pool boiling and flow boiling. Phenomenological modeling.

**Requisites:** M E 361 and (M E 364 or CBE/B M E 320), or graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**N E/E C E/PHYSICS 525 – INTRODUCTION TO PLASMAS**

3 credits.

Basic description of plasmas: collective phenomena and sheaths, collisional processes, single particle motions, fluid models, equilibria, waves, electromagnetic properties, instabilities, and introduction to kinetic theory and nonlinear processes. Examples from fusion, astrophysical and materials processing plasmas.

**Requisites:** (E C E 320 or PHYSICS 322), graduate/professional standing, or member of Engineering Guest Students**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**N E 526 – LABORATORY COURSE IN PLASMAS**

3 credits.

Provides a background in the techniques for creating, exciting, and measuring the properties of lab plasmas and using the associated apparatus.

**Requisites:** N E/E C E/PHYSICS/E C E/N E 525 or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**N E/E C E/PHYSICS 527 – PLASMA CONFINEMENT AND HEATING**  
3 credits.

Principles of magnetic confinement and heating of plasmas for controlled thermonuclear fusion: magnetic field structures, single particle orbits, equilibrium, stability, collisions, transport, heating, modeling and diagnostics. Discussion of current leading confinement concepts: tokamaks, tandem mirrors, stellarators, reversed field pinches, etc.

**Requisites:** N E/PHYSICS/E C E/N E/PHYSICS 525, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E/E C E 528 – PLASMA PROCESSING AND TECHNOLOGY**  
3 credits.

Introduction to basic understanding and techniques. Plasma processing of materials for semiconductors, polymers, plasma spray coatings, ion implantation, etching, arcs, extractive metallurgy and welding. Plasma and materials diagnostics.

**Requisites:** PHYSICS 322 or E C E 320, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**N E 536 – FEASIBILITY STUDY OF POWER FROM CONTROLLED THERMONUCLEAR FUSION**  
3 credits.

Introduction to the use and design of possible fusion reactors. Problems of the plasma confinement and energy density, neutronics of blanket design, and radiation damage.

**Requisites:** N E 405 and 411, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 541 – RADIATION DAMAGE IN METALS**  
3 credits.

A survey of the nature of point defects, how these defects are produced, how the defects migrate and cluster, and what effects point defects and defect clusters have on the physical and mechanical properties of metals.

**Requisites:** M S & E 350 or 351, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 545 – MATERIALS DEGRADATION IN ADVANCED NUCLEAR REACTOR ENVIRONMENTS**  
3 credits.

Overview of materials (cladding and structural materials) used in advanced reactor systems and the associated degradation. Interactions between the advanced nuclear reactor environment and materials. Surface degradation, corrosion, oxidation, dissolution, vaporization, mass transfer, diffusion, and hands-on examples related to advanced reactors.

**Requisites:** M S & E 350, 351, or 352, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 550 – ADVANCED NUCLEAR POWER ENGINEERING**  
3 credits.

Analysis of nuclear systems for the production of useful power. Emphasis: thermodynamic cycles, reactor types, coupling of reactor and power plant, design synthesis, and plant economics.

**Requisites:** N E 405 and (411 or concurrent enrollment), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 555 – NUCLEAR REACTOR DYNAMICS**  
3 credits.

Basic equations and physical parameters of point reactor kinetics without feedback effects; the nuclear reactor as a total system; reactor excursions, Fuchs-Nordheim and Bethe-Tait models; space-time reactor dynamics; synthesis methods.

**Requisites:** N E 405, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**N E/M E 565 – POWER PLANT TECHNOLOGY**  
3 credits.

Design and performance of power plants for the generation of electric power; fossil and nuclear fuels, cycle analysis, component design and performance, plant operation, control, economics and environmental impact. Advanced concepts.

**Requisites:** M E 361, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**N E/MED PHYS 569 – HEALTH PHYSICS AND BIOLOGICAL EFFECTS**

3-4 credits.

Physical and biological aspects of the use of ionizing radiation in industrial and academic institutions; physical principles underlying shielding instrumentation, waste disposal; biological effects of low levels of ionizing radiation; lecture and lab.

**Requisites:** MATH 234 and (PHYSICS 241 or 249) or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E 571 – ECONOMIC AND ENVIRONMENTAL ASPECTS OF NUCLEAR ENERGY**

3 credits.

Economics of the nuclear fuel cycle. Economic and environmental impact the nuclear fuel cycle. Impact on design, plant siting and regulation.

**Requisites:** N E 405, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E/ISY E 574 – METHODS FOR PROBABILISTIC RISK ANALYSIS OF NUCLEAR POWER PLANTS**

3 credits.

Methods for risk and reliability analysis of engineered systems, particularly as applied in the nuclear power industry. Fault trees and event trees, Bayesian data analysis, probabilistic risk management. Some familiarity with nuclear plant safety systems is helpful, but not required.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, 224, 324, or MATH/STAT/MATH 431), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 602 – SPECIAL TOPICS IN REACTOR ENGINEERING**

0-3 credits.

Special Topics in Reactor Engineering.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**N E 699 – ADVANCED INDEPENDENT STUDY**

0-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**N E 705 – ADVANCED REACTOR THEORY**

3 credits.

The neutron transport equation and its application to the analysis of nuclear reactors. Numerical solution methods, including the multi-group model, one-group equations, energy-averaged constants, discrete ordinates, and Monte Carlo methods. Perturbation theory and variational techniques for practical problems. Knowledge of Nuclear Reactor Theory [such as N E 405] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E/C&E SOC/ISY E/SOC 708 – SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS**

3 credits.

Issues involved in decision-making regarding technological risks and risk management in areas such as nuclear power, hazardous waste disposal, and pollution control. Risk perception and cognitive biases; risk analysis and decision analysis; political issues in risk management; regulatory mechanisms; and risk communication. Selected case studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**N E/E C E/PHYSICS 724 – WAVES AND INSTABILITIES IN PLASMAS**

3 credits.

Waves in a cold plasma, wave-plasma interactions, waves in a hot plasma, Landau damping, cyclotron damping, magneto-hydrodynamic equilibria and instabilities, microinstabilities, introduction to nonlinear processes, and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**N E/E C E/PHYSICS 725 – PLASMA KINETIC THEORY AND RADIATION PROCESSES**

3 credits.

Coulomb Collisions, Boltzmann equation, Fokker-Planck methods, dynamical friction, neoclassical diffusion, collision operators radiation processes and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**N E/E C E/PHYSICS 726 – PLASMA MAGNETOHYDRODYNAMICS**  
3 credits.

MHD equations and validity in hot plasmas; magnetic structure and magnetic flux coordinates; equilibrium in various configurations; stability formulation, energy principle, classification of instabilities; ideal and resistive instability in various configurations, evolution of nonlinear tearing modes; force-free equilibria, helicity, MHD dynamo; experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/ N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**N E 741 – INTERACTION OF RADIATION WITH MATTER**  
3 credits.

Review of topics in electrodynamics and special relativity; ionization and energy loss during scattering of charged particles; radiation from charged particles including Bremsstrahlung, Cerenkov, and Synchrotron radiation; Thomson scattering of electromagnetic waves by charged particles. Knowledge of Dynamics [such as EMA 202 or PHYSICS 311] and Electromagnetics [such as PHYSICS 322] required.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**N E/E C E/PHYSICS 749 – COHERENT GENERATION AND PARTICLE BEAMS**  
3 credits.

Fundamental theory and recent advances in coherent radiation charged particle beam sources (microwave to X-ray wavelengths) including free electron lasers, wiggler/wave-particle dynamics, Cerenkov masers, gyrotrons, coherent gain and efficiency, spontaneous emission, beam sources and quality, related accelerator concepts experimental results and applications.

**Requisites:** E C E 740

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**N E 790 – MASTER'S RESEARCH AND THESIS**  
1-9 credits.

Directed study projects as arranged with instructor.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**N E 890 – PRE-DISSERTATOR'S RESEARCH**  
1-9 credits.

Research by the Ph.D. students prior to becoming dissertators.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**N E 903 – SPECIAL TOPICS-PLASMA PHYSICS**  
0-3 credits.

Special Topics in Plasma Physics. Knowledge of Plasma Physics [such as PHYSICS/E C E/N E 525] required

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**N E/E C E/PHYSICS 922 – SEMINAR IN PLASMA PHYSICS**  
0-1 credits.

Current topics in plasma physics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**N E 990 – RESEARCH AND THESIS**  
1-6 credits.

Directed study projects as arranged with instructor.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**N E 999 – ADVANCED INDEPENDENT STUDY**  
1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

## NURSING (NURSING)

**NURSING 100 – INTRODUCTION TO THE NURSING PROFESSION**  
1 credit.

Introduction to the breadth of careers and educational pathways in the nursing profession. Explore personal interests, capacities, and career goals in relation to nursing career options.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **NURSING/S&A PHM/SOC WORK 105 – HEALTH CARE SYSTEMS: INTERDISCIPLINARY APPROACH**

2 credits.

Introduction to health care systems. Factors affecting health and the value placed on health, the delivery of health care in different settings, the roles of various health workers, and the sociological and economic aspects of health care.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **NURSING 299 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 313 – FOUNDATIONS OF NURSING PRACTICE**

2-3 credits.

Focuses on foundational concepts necessary to provide person-centered, evidence-based nursing care, including the nursing process and health and illness concepts. Active learning is emphasized by gaining confidence with applying the nursing processes and begin to develop clinical judgment and assessment skills. Complements a companion experiential course [NURSING 316].

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 314 – HEALTH PROMOTION AND DISEASE PREVENTION ACROSS THE LIFESPAN**

3 credits.

Focuses on the role of the baccalaureate generalist nurse in health promotion and disease prevention across the lifespan. Learn about factors that impact health of individuals and families. Active learning is emphasized through applying the nursing process to concepts such as health determinants, health education, self- management, and innate psychological needs related to well-being.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 315 – PROFESSIONALISM IN NURSING PRACTICE**

1-2 credits.

Focuses on professional nursing attributes and interaction essential to professional competence. Study concepts that allow you to provide care unique to an individual, family, community, and systems, and to the context in which they live. Concepts related to the health care system are included to provide a foundation for beginning nursing practice. Knowledge from sciences, social studies, and humanities education is integrated into nursing practice and builds foundational knowledge of the science of nursing.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 316 – FOUNDATIONS OF NURSING PRACTICE: EXPERIENTIAL LEARNING**

4-5 credits.

Introduces psychomotor and assessment skills necessary to provide person-centered, evidence-based nursing care. Experience opportunities to promote wellness and respond to health problems by participating in direct client care in community and acute-care settings. Develop confidence with the application of skills and clinical judgment in a simulation lab and through concept-based learning experiences in care settings.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Course Designation:** Workplace – Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 317 – PHARMACOLOGY ESSENTIALS FOR NURSING PRACTICE**

2-3 credits.

Introduces the foundational concepts of pharmacology, drug therapy, actions and interactions, and their therapeutic and adverse effects. Major drug classes are paired with health and illness concepts while considering the appropriate client-centered nursing interventions for disease states as they relate to retaining, attaining, or maintaining patients' health status across the lifespan.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 318 – PATHOPHYSIOLOGY ESSENTIALS FOR NURSING PRACTICE**

3 credits.

Promotes the understanding of altered physiological processes underlying illness and disease. General concepts including etiology, pathogenesis, morphologic changes, and clinical significance are explored from the genetic, molecular, cellular, organ, and systems-levels. Connections between patient symptoms, clinical signs, diagnostics, prognosis, and therapeutic considerations will form the basis for early exposure to clinical reasoning for common acute and chronic diseases across the lifespan.

**Requisites:** Declared in Nursing (Accelerated or Traditional program) BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 323 – HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS AND FAMILIES**

4 credits.

Focuses on health and illness concepts emphasizing care to individuals and families across the lifespan. Gain a fundamental understanding of allostasis, oxygenation and hemostasis, and protection and movement. Gain knowledge of these concepts through exemplars that illustrate common health processes and/or alterations. Frames learning activities that foster understanding of the nursing role in providing care to individuals and families experiencing related health and illness concerns.

**Requisites:** NURSING 313**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 324 – MEETING THE PSYCHOSOCIAL HEALTH NEEDS OF INDIVIDUALS, FAMILIES, AND COMMUNITIES**

3 credits.

Prepares to meet the psychosocial health needs of individuals, families, and communities across the lifespan. Explore psychosocial concepts of stress, coping, mood, cognition, and behavior across the health-illness continuum and across practice settings. The human experience of psychosocial health needs is explored in the context of personal attributes, such as genetics, and interpersonal dynamics, such as family and community. Acquire the knowledge, attitudes, and skills needed to collaborate in the treatment and care of client psychosocial health needs.

**Requisites:** NURSING 314**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 325 – PROFESSIONALISM IN HEALTH CARE SETTINGS**

2 credits.

Focuses on advancing knowledge of professional attributes and core competencies in the role of a nurse and how they are used in complex care settings. Gain an understanding of concepts of leadership, ethics, and advocacy. Broaden your understanding of nursing's role in the health care delivery system regarding quality improvement, care coordination, and palliation.

**Requisites:** NURSING 315**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 326 – HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS AND FAMILIES: EXPERIENTIAL LEARNING I**

2 credits.

Builds on psychomotor and assessment skills necessary to provide direct care to individuals and families across the lifespan. Develop clinical judgment, knowledge, communication skills, and professional behavior while providing nursing care that is safe, evidence-based, and patient centered. Experiential learning takes place in simulated and clinical settings.

**Requisites:** NURSING 313, 314, 315, 316 and 317**Course Designation:** Workplace - Workplace Experience Course**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 327 – HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS AND FAMILIES: EXPERIENTIAL LEARNING II**

2 credits.

Builds on psychomotor and assessment skills necessary to provide direct care to individuals and families across the lifespan. Develop clinical judgment, knowledge, communication skills, and professional behavior while providing nursing care that is safe, evidence-based, and patient centered. Experiential learning takes place in simulated and clinical settings.

**Requisites:** NURSING 326**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 400 – STUDY ABROAD IN NURSING**

1-6 credits.

A study abroad equivalency. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Repeatable for Credit:** Yes, for 2 number of completions**NURSING 433 – ESSENTIALS OF GERONTOLOGICAL NURSING**

3 credits.

Health and functional ability of the elderly population as they relate to nursing practice are the focus of this course. Common health problems found in this population are studied with an emphasis on prevention and nursing management.

**Requisites:** Declared in Nursing BSN**Repeatable for Credit:** No**Last Taught:** Fall 2017**NURSING 434 – HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS, FAMILIES, AND COMMUNITIES**

4-5 credits.

Builds on health and illness concepts by focusing on individuals, families, and communities recognizing their unique attributes. Concepts included: acid-base balance, cellular regulation, intracranial regulation, genomics, sexuality and reproduction, and an introduction to the organization of the community/public health system. Other core nursing concepts are revisited as they apply to the community as client or in complex care situations. The nursing process frames learning activities that foster understanding the nursing role in providing evidence-based care to individuals, families across the lifespan, and to communities experiencing related health and illness concerns in collaboration with an interprofessional team.

**Requisites:** Declared in Nursing or Nursing (Accelerated Program), NURSING 323 or concurrent enrollment, NURSING 326 or concurrent enrollment, and NURSING 327 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Fall 2022

**NURSING 435 – EVIDENCE-BASED PRACTICE**

1 credit.

Designed to develop skills in using evidence to improve nursing practice. Learn strategies to evaluate the quality of evidence and effectively integrate evidence into nursing practice. Learn how practice guidelines are developed, interpreted, and implemented in complex care settings. Learn the significance of engaging partners in evidence-based practice and identify processes to partner with others.

**Requisites:** NURSING 315 and 325**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 436 – HEALTH AND ILLNESS CONCEPTS WITH INDIVIDUALS, FAMILIES, AND COMMUNITIES: EXPERIENTIAL LEARNING**

1-4 credits.

Spend concentrated time in two settings focusing on care to individuals across the lifespan, families, and communities. The concept-based learning activities are aligned with those taught in the companion didactic courses and build on previous learning and experiences. Provide direct care from an evidenced-based perspective, at an increasingly independent level. The learning activities are guided by nursing preceptors in practice settings and by School of Nursing faculty in simulation and seminar settings.

**Requisites:** NURSING 323, 324, and 327**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023**NURSING 437 – SOCIAL JUSTICE IN LOCAL AND GLOBAL SETTINGS**

2-3 credits.

Learn principles and practices of social justice related to nursing and health in local and global settings. Concepts include health determinants, diverse populations in complex care settings, health outcomes, and interventions for racial and other underrepresented minorities. Expand the understanding of global health by examining global health systems, health and illness concepts on a global level, partnerships enacted in global settings, and the scope of nursing practice in global health. Provides a facilitated forum to critically reflect on their socially constructed identities and the impact these identities have on health care systems. Designed to develop perspective related to global health and nurses as global health actors invested in improving health of the global population as a whole.

**Requisites:** NURSING 323**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 442 – HEALTH SYSTEMS, POLICY, AND ECONOMICS**

2 credits.

Learning is centered on health systems, policy, and economics. Expand understanding of core nursing competencies such as safe therapeutic care, and health informatics by examining how these concepts operate at a systems-level to influence care and outcomes. Focus is given to emergency preparedness as enacted in a variety of systems. Key conceptual elements of the healthcare system, organization, policy, financing and law and quality improvement and their impact on care and outcomes are examined.

**Requisites:** NURSING 434, 435, 436, and 437**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 443 – ADVANCED CONCEPTS IN COMPLEX NURSING PRACTICE**

5 credits.

Learn about complex health or health alterations and their management in regard to sexuality, reproduction, protection and movement, cognitive function, and maladaptive behavior. Emphasizes the nurse's role in management of complex health alterations within the health system, the community, and for transitions to home. The nursing process will frame learning activities that foster understanding the nursing role in providing evidence-based care to individuals, families, and communities experiencing related health and illness concerns in collaboration with an interprofessional team.

**Requisites:** NURSING 434 or concurrent enrollment, NURSING 435 or concurrent enrollment, NURSING 436 or concurrent enrollment, and NURSING 437 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 444 – HEALTH SYSTEMS, POLICY, ECONOMICS, AND RESEARCH**

3 credits.

Expand understanding of core nursing competencies such as safe therapeutic care and health informatics by examining how these concepts operate at a systems-level to influence care and outcomes. Focus is given to emergency preparedness as enacted in a variety of systems. Key conceptual elements of the healthcare system, organization, policy, financing and law, and quality improvement and their impact on care and outcomes are examined. Expand your understanding of scholarship and evidence-based practice by delving into the process of nursing research.

**Requisites:** NURSING 434, 435, 436, and 437**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 445 – TRANSFORMATIVE NURSING CAPSTONE**

1 credit.

Integration of learning acquired throughout the nursing program. Learning outcomes integrate concepts associated with five nursing program meta concepts (professionalism; person, family, community, and systems-centered care; health and illness; health care context; and scholarship for evidence-based practice). Using processes of analysis, synthesis, reflection, and application, advance in your transition to becoming a professional nurse. Includes mentoring through co-facilitation by faculty, academic staff, and practice professionals.

**Requisites:** NURSING 434, 435, 436, and 437**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 446 – ADVANCED CONCEPTS IN COMPLEX NURSING PRACTICE: EXPERIENTIAL LEARNING**

2-5 credits.

Spend concentrated time in two settings focusing on the complex care of individuals across the lifespan, families, and communities. Demonstrate advanced ability to integrate professional nursing related theory and concepts as they develop and implement the plan of care. Mentoring by clinical nursing preceptors in the clinical setting and by School of Nursing faculty in simulation and seminar settings.

**Requisites:** NURSING 436**Repeatable for Credit:** Yes, for 2 number of completions**Last Taught:** Spring 2023



**NURSING 447 – SCHOLARSHIP FOR EVIDENCE-BASED PRACTICE**  
2 credits.

Develop skills in using evidence to improve nursing practice. Learn strategies to evaluate the quality of evidence and effectively integrate evidence into nursing practice. Provides knowledge in how practice guidelines are developed, interpreted, and implemented in complex care settings. Understand the significance of engaging partners in evidence-based practice and identify processes to partner with others in order to have an impact on client care outcomes.

**Requisites:** Declared in Nursing (Accelerated Program), NURSING 314, 323, 324, 326, 327, and 434

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 448 – LEADERSHIP IN THE PROFESSION OF NURSING**  
2 credits.

Learning is centered on advancing knowledge of professional attributes necessary in healthcare settings. Expand the understanding of core concepts related to ethics, advocacy, safe therapeutic care, technology, and health informatics at a systems-level to influence care and outcomes. Broaden the understanding of nursing's role in the healthcare delivery system regarding quality improvement, emergency preparedness, care coordination, and palliation.

**Requisites:** Declared in Nursing (Accelerated Program), NURSING 314, 323, 324, 326, 327, and 434

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 470 – SCHOOL NURSING IN THE CONTEXT OF COMMUNITY HEALTH PRACTICE**  
2-3 credits.

Theoretical foundation for community health nursing (CHN) applied to school nurse settings. Acquire the theoretical and practical foundations for establishing and maintaining school health nursing services. Content is drawn from nursing and public health sciences and includes topics of health promotion, disease prevention, epidemiology, evidence based practice, ethics, and the role of the CHN. The nursing process is applied with a focus of providing care at the individual through the population level. The ecological model is used to analyze the influence of socioeconomic, environmental, political, and cultural health determinants.

**Requisites:** Declared in Nursing BSN

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 490 – MENTAL HEALTH NURSING ACROSS THE CARE CONTINUUM**  
3 credits.

Designed to expand the knowledge and skills necessary for providing professional nursing care to individuals, groups, and families affected by mental illness in any setting. Particular attention is focused on complex health conditions and development of clinical reasoning to support competent nursing practice.

**Requisites:** Declared in Nursing (Collaborative Program) BSN

**Repeatable for Credit:** Yes, unlimited number of completions

**NURSING 510 – CULTURALLY CONGRUENT PRACTICE**  
3 credits.

Builds self-awareness, increasing knowledge, and advancing clinical skills needed to provide culturally congruent, person-centered care to patients with diverse backgrounds.

**Requisites:** None

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 511 – COMMUNITY SUPPORTS FOR PEOPLE WITH DEMENTIA**  
2-3 credits.

Provides an introduction to Alzheimer's disease and other dementias, with a focus on community supports for people living with dementia. Work across disciplines to learn how different areas of society can become dementia friendly and how to integrate relevant approaches in their future careers. Participate in a service-learning opportunity where you will work with local dementia-friendly community groups to strengthen supports for people with dementia and their caregivers.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING/L I S/OCC THER 517 – DIGITAL HEALTH: INFORMATION AND TECHNOLOGIES SUPPORTING CONSUMERS AND PATIENTS**  
3 credits.

Increases student understanding of appropriate and accurate materials for consumer health and family education; the ethical and organizational policy issues that arise when providing consumer and family health information in different settings; the role of the public media in disseminating health information; the health-related information needs and preferences of racial/ethnic minority populations. It also provides an introduction to health information technologies, from search engines to websites to apps, that put people in charge of managing their own health information.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING/KINES 523 – CLINICAL EXERCISE TESTING & TRAINING**  
3 credits.

Physiological basis and methods of human exercise testing and training. Topics: clinical exercise physiology, exercise testing protocols, cardiopulmonary monitoring, basic ECG interpretation, exercise prescription.

**Requisites:** Declared in Kinesiology and KINES 314

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**NURSING/POP HLTH 525 – NURSING LEADERSHIP FOR GLOBAL HEALTH**

2-3 credits.

Designed to prepare undergraduate and graduate nursing students for leadership in global health (GH) by examining their GH goals in a framework that integrates knowledge from nursing with contemporary GH knowledge. Directed toward improving health of the global population as a whole, the framework addresses health trends, practice frameworks, the ecological model, ethics, nursing leadership roles, concepts of partnership and evidence-based practice.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2016**NURSING 564 – NURSING AND HEALTH INFORMATICS**

3 credits.

Identification of computer and information technologies to support nursing in the diagnosis and treatment of human responses to health, illness, and development challenges. Examination of information systems used in clinical practice, information processing challenges and nurses' roles in the evaluation of informatics solutions. Ethical, legal and social issues related to informatics in patient care. Jr St or cons inst

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Summer 2022**NURSING 590 – CONTEMPORARY PRACTICES IN NURSING**

1-4 credits.

Health problems and their nursing management, e.g., critical care nursing, health promotion and prevention of disease, nursing of developmental disabilities.

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**NURSING 601 – ADVANCED HEALTH ASSESSMENT**

3 credits.

Focuses on developing advanced practice competencies in health assessment as relevant to a selected specialty and practice setting. Become grounded in the theoretical perspectives, empirical documentation, and practice skills necessary for advanced biopsychosocial and physical assessment, critical diagnostic reasoning, clinical decision-making, and communication. Interactions of developmental, biopsychosocial, and cultural contexts resulting in health effects. Demonstrate capacity to provide a full spectrum of healthcare services including health promotion, disease prevention, health protection, anticipatory guidance, counseling, and disease management. Provides a foundation for the advanced practice nurse to evaluate and address the health of individuals.

**Requisites:** NURSING 704**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING/PHM PRAC 605 – PHARMACOTHERAPEUTICS FOR ADVANCED PRACTICE NURSES**

3 credits.

Pharmacotherapeutics content and application for advanced practice nursing. Emphasis on selection of appropriate therapeutics, development of clinical decision-making skills, and examination of legal, ethical, and safety issues in prescribing medications.

**Requisites:** Declared in a School of Nursing graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 657 – CLINICAL PSYCHOPHARMACOLOGY**

3 credits.

Examines the history, rationale and mechanism of action of drugs used in the treatment of mental health and behavioral disorders. Emphasis is placed on neurobiological processes underlying psychopathology and clinical application of evidence-based pharmacological interventions across the lifespan. In addition, focus on pharmacokinetics, pharmacodynamics, side-effects, drug interactions, therapeutic monitoring and variations in special populations. Finally, review prescriptive authority, the potential impact of the current mental health care service system and ethical decision making for health care professionals.

**Requisites:** Declared in Doctor of Nursing Practice or Capstone Certificate in Post-Graduate Psychiatric Nursing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**NURSING/PHM PRAC 674 – SEMINARS IN INTERPROFESSIONAL MENTAL HEALTH CARE**

2 credits.

Addresses the team-based and patient-centered care of persons with mental health conditions. A special focus will be put on the management of psychotropic medication regimens. A combination of lecture, discussion, and small group work will be utilized.

**Requisites:** PHM PRAC 555**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 679 – NURSING HONORS RESEARCH SEMINAR**

2 credits.

Provides the opportunity to learn more about the generation of nursing knowledge and about School of Nursing faculty members' research projects. An introduction to the principles, methods, and ethics of nursing research, strategies to evaluate the quality of research, and the importance of research for improving clinical practice.

**Requisites:** Declared in the Nursing Honors program**Repeatable for Credit:** No**Last Taught:** Spring 2023

**NURSING 680 – HONORS SEMINAR**

1 credit.

Provides honors students with an opportunity to learn about faculty research interests.

**Requisites:** Declared in the Nursing Honors program

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**NURSING 681 – SENIOR HONORS THESIS**

1-2 credits.

The senior honors thesis is directed experience with selected aspects of the research process. Declared in the Nursing Honors Program

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NURSING 682 – SENIOR HONORS THESIS**

1-2 credits.

The senior honors thesis is a directed experience with selected aspects of the research process. Declared in the Nursing Honors Program

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 698 – DIRECTED STUDY IN NURSING**

1-6 credits.

Directed study offers the student an opportunity to work with a faculty member on an individual study program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NURSING 699 – DIRECTED STUDY IN NURSING**

1-4 credits.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NURSING 702 – HEALTH PROMOTION AND DISEASE PREVENTION IN DIVERSE COMMUNITIES**

3 credits.

Best practice approaches to health promotion and disease prevention are explored from their theoretical foundations to clinical applications in diverse populations. Content focuses on the study and synthesis of epidemiologic evidence with emerging social, psychological, and biological science to critically examine and propose evidence-based strategies to improve health outcomes, mitigate risk, and reduce disparities at the population level. Epidemiological principles, levels of prevention, population health theory, infectious disease control, and considerations specific to health equity and ethical health promotion practice in populations will be addressed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NURSING 703 – HEALTH CARE AND PUBLIC POLICY**

3 credits.

Provides a comprehensive overview of the U.S. healthcare system and policy-making process at the local, state, and federal levels, as well as an analysis of global health policies in other countries. Key policy issues covered include Medicare, Medicaid, the uninsured, public health, and healthcare reform. Addresses the role of key stakeholders, including policy-makers, interest groups, and the media on the development of health policy, as well as key forces involved in policy-making, including economics, innovation, social, ethical, and political factors. Examine the role and responsibility of nurse leaders and the impact of health policy on nursing practice at the individual, community, and population level.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 704 – LEADERSHIP IN ADVANCED PRACTICE NURSING I**

3 credits.

Transition and expansion of leadership role for advanced practice. Emphasis on the development of effective, ethical leadership styles; interpretation of legal and professional requirements and regulations; examination of the ethics, values, beliefs, and norms of decision-making in interdisciplinary, collaborative practice.

**Requisites:** Declared in a Nursing graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING/MEDICINE/POP HLTH 705 – SEMINAR IN INTERDISCIPLINARY CLINICAL RESEARCH EVIDENCE**

2 credits.

Exploration of interdisciplinary clinical research questions including strategies for assessing the evidence and conducting a systematic review of research. An interdisciplinary perspective is emphasized throughout the course.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and BMI/STAT/B M I 542

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **NURSING 706 – NURSING RESEARCH**

3 credits.

Examines a variety of research methods available to address health care problems and issues in general, and nursing in particular.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 708 – ETHICS FOR ADVANCED PRACTICE IN HEALTH CARE**

2 credits.

Emphasis on the exploration of ethical knowledge development with a focus on clarification, analysis and justification relevant to advanced nursing practice; examination and development of learners' moral understanding; and distinguishing between moral and other professional responsibilities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **NURSING 709 – LEADERSHIP FOUNDATIONS: THE DISCIPLINE OF NURSING**

2 credits.

Examination of the substantive foundations of the discipline of nursing from a broad range of perspectives and domains of knowledge. The emphasis is on the identification and analysis of phenomena of concern to nursing, scientific and theoretical underpinnings of the discipline, the centrality of health and environment, hallmarks of scholarliness, and nursing leadership and collaboration to actualize the goals of nursing. Provides a foundational knowledge, skills, and attitudes needed for nursing leadership and population health.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 711 – BUSINESS CONCEPTS IN HEALTHCARE**

3 credits.

Designed to prepare nurse leaders to recognize, analyze, and respond to current business concepts (e.g., human resources, legal, regulatory, and accreditation), economic, and financial management topics in healthcare systems. Applies key financial and business concepts to healthcare and examines current issues and trends in healthcare finance, including accounting, budgeting, cost analysis, human resource management, and the regulatory environment. Opportunities to analyze and evaluate the revenue and costs associated with a specific healthcare delivery system at the program- or organizational-level. Utilizes case studies including financial and clinical data to effectively balance the administrative and clinical needs of today's healthcare environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 712 – HEALTH SYSTEMS LEADERSHIP AND INNOVATION PRACTICUM I**

3 credits.

An opportunity to explore and analyze healthcare systems including practical skills in leading teams. An individualized planned practicum provides an opportunity to explore the leader roles (multiple settings) within the context of an administrative issues. Emphasis is on clinical engagement in management projects requiring critical assessment, design, planning, intervention, and evaluation activities using theoretical models and management tools. The focus is on the advanced systems analysis and design of programs and services within an organization/ community setting.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 713 – HEALTH SYSTEMS LEADERSHIP AND INNOVATION PRACTICUM II**

3 credits.

Continue the application of leadership and management skills and role development with a focus on leadership and innovation within complex health settings and across multisector partnerships. Emphasis on clinical engagement in management projects requiring critical assessment, design, planning, intervention, and evaluation activities using theoretical models and management tools to leverage technology and innovation. Focuses on leadership and innovation of programs and services within an organization/community-setting.

**Requisites:** NURSING 712

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 714 – ADVANCED HEALTH SYSTEMS LEADERSHIP AND INNOVATION**

3 credits.

Focuses on health innovation and leadership, integrating systems thinking and relevant theories to advance innovation and achieve sustainable change in contemporary health settings. Leaders apply and synthesize theories of leadership, innovation, informatics, and business concepts to complex healthcare issues to improve outcomes. Utilizes current and emerging issues, theories, and case studies to explore attributes of innovative leaders, emerging models of care, innovation models, design and adoption, mergers and affiliations in healthcare, and entrepreneurship.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 715 – EVALUATION OF HEALTH INFORMATICS SOLUTIONS**

3 credits.

Evaluate and appraise health informatics and information technology in order to develop integrative approaches to the design, implementation and evaluation of health informatics solutions and problems. Application of standards, document architecture, decision support systems and heuristic rules and system life-cycle are key areas of focus. People and organization issues for system implementation and evaluation are applied to real data issues to examine privacy, data protection, and institutional responsibilities.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 719 – INDEPENDENT FIELD STUDY IN CLINICAL NURSING**

1-6 credits.

Concentrated study and field work in a selected area of clinical nursing.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**NURSING 720 – POPULATION HEALTH PRACTICUM I: WORKING IN THE AGGREGATE**

3 credits.

Experiential learning focused on the application of foundational skills and perspectives of advanced population health nursing practice. Provides an opportunity to synthesize, integrate, and apply new knowledge and skills and gain professional experience in population health. Emphasis is on aggregate assessment and evidence-based planning, including critical appraisal of existent data, generation of primary data, community engagement, participatory solution-finding, and the identification of evidence-based strategies to promote and protect health and well-being.

**Requisites:** NURSING 702 or concurrent enrollment**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 721 – POPULATION HEALTH PRACTICUM II: COMMUNITY ACTION AND COLLECTIVE IMPACT**

3 credits.

Fosters advanced practice competencies and deeper understandings of collaborative practice in population health. Employ structured systems thinking, stakeholder engagement, and interdisciplinary leadership to investigate and address complex issues in population health. Advanced practice competencies to be developed include: structured approaches to systems thinking, community engagement, collaborative leadership, responsive communication, teamwork, multidisciplinary program planning, cross-sector collaboration, and collective impact.

**Requisites:** NURSING 720 and 723**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 722 – ADVANCED PRACTICE NURSING THEORY: ADULTS AND OLDER ADULTS**

3 credits.

Examine theoretical perspectives and evidence-based approaches to human responses to health and illness during adulthood and old age. Concepts and research from multiple disciplines will be examined as a framework for reflective practice with adults.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **NURSING 723 – POPULATION HEALTH THEORY AND METHODS SEMINAR I: CONTEMPORARY ISSUES & POPULATION HEALTH ETHICS**

2 credits.

Introduction to the foundational concepts, core functions, and professional values of advanced population health nursing. Contemporary issues in population health will be used to explore and integrate the epidemiological science, theoretical constructs, ethical considerations, and best practice strategies that underlie sound practice.

**Requisites:** NURSING 702

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 724 – POP HEALTH THEORY & METHODS SEMINAR II: INTERDIS PRACTICE, COLLECTIVE IMPACT & COALITION BUILDING**

2 credits.

Builds on existing practice knowledge and skills with concepts from systems thinking, complex problem-solving, interdisciplinary collaboration, community engagement, coalition-building, and collective impact. Explorations of "wicked" problems in population health will challenge you to consider novel partnerships, shared decision-making, and innovative, multifaceted approaches to practice.

**Requisites:** NURSING 721 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **NURSING 725 – POPULATION HEALTH THEORY AND METHODS SEMINAR III: EMERGING ISSUES AND SPECIALIZED ROLES**

2 credits.

Explore specialized roles, emerging issues, and current priorities in advanced population health nursing. Analyze novel and emergent population health challenges within context, and consider the unique knowledge, skills, and philosophies that prepared nurses can bring to solution-seeking and interdisciplinary efforts to promote or safeguard population health.

**Requisites:** NURSING 724

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **NURSING 726 – FOUNDATIONS FOR APN CLINICAL PRACTICE I**

3 credits.

Designed to advance knowledge for clinical decision making. Health promotion, illness prevention and common health conditions are emphasized.

**Requisites:** NURSING 601, 605, 811, and concurrent enrollment in NURSING 728

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING 727 – FOUNDATIONS FOR APN CLINICAL PRACTICE II**

3 credits.

Designed to advance knowledge for clinical decision-making. Complex and chronic health conditions are emphasized while continuing to promote health maintenance within the context of existing health problems.

**Requisites:** NURSING 726, 728, and concurrent enrollment in NURSING 729

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 728 – ADVANCED PRACTICE CLINICAL APPLICATION AND ROLE DEVELOPMENT I**

1-4 credits.

Supervised clinical practicum focuses on the continued development and application of advanced health promotion, assessment and clinical management skills within the context of chronic illness and complex health issues.

**Requisites:** Concurrent enrollment in NURSING 726

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING 729 – ADVANCED PRACTICE CLINICAL APPLICATION AND ROLE DEVELOPMENT II**

1-4 credits.

Supervised clinical practicum focuses on the continued development and application of advanced health promotion, assessment and clinical management skills within the context of chronic illness and complex health issues.

**Requisites:** Concurrent enrollment in NURSING 727

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 730 – CRITICAL SOCIAL THEORIES IN POPULATION HEALTH**

2 credits.

Examines the application of critical social theories in population health promotion when intersectionality, bias, and social inequities are social determinants of population health disparities. Intended to provide an opportunity to apply critical social theories to long-standing population health disparities and contemporary social health problems such as despair, homelessness, and loneliness. Emphasis on the appraisal of intersectionality, bias, and inequities in previous, present, or potential population health promotion strategies to eliminate health disparities.

**Requisites:** NURSING 723 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NURSING 736 – PEDIATRIC ASSESSMENT FOR MENTAL HEALTH  
ADVANCED PRACTICE NURSES**

1 credit.

Advance students' knowledge of pediatric development to enhance clinical decision-making with emphasis on applying advanced assessment skills to the child and adolescent population.

**Requisites:** Declared Post-Graduate Psychiatric Mental Health Nursing Capstone Certificate or (NURSING 601, NURSING/PHM PRAC 605, and NURSING 811)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 740 – ISSUES IN NURSING CARE OF CHILDREN WITH  
CHRONIC ILLNESS IN THE SCHOOLS**

1 credit.

An opportunity to discuss emerging issues in the field of school nursing care of children with chronic health conditions. Introduction to professional development issues commonly experienced by professionals working with children with chronic illnesses and how these issues impact the nurse practicing in the school setting.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**NURSING 741 – ADVANCED PRACTICE NURSING THEORY: FAMILY  
PROCESS & CHILD DEVELOPMENT**

3 credits.

Analyzes selected family and child development theories and research that inform advanced practice nursing. Applies these concepts to assess child and family needs, enhance the parent-child relationship, and develop family-centered, culturally responsive interventions in health and illness.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NURSING/PHM PRAC/SOC WORK 746 – INTERDISCIPLINARY  
CARE OF CHILDREN WITH SPECIAL HEALTH CARE NEEDS**

3 credits.

Interdisciplinary team care of children with special health care needs across the trajectory of illness presented within the context of family, culture, social determinants of health, community, and healthcare policy. Students introduced to interdisciplinary, collaborative, family-centered team care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 751 – ADVANCED PRACTICE NURSING THEORY:  
PSYCHIATRIC MENTAL HEALTH**

3 credits.

Analysis and integration of selected theories and models in psychotherapy, neuroscience, mental health, psychiatric disorders, and advanced psychiatric mental health nursing in complex care settings with diverse patients, communities, and populations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NURSING/PHARMACY/PHY ASST/PHY THER/PUBLHLTH 758 –  
INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP**

1 credit.

Build skills in collaboration, problem solving, and reflection to approach complex community-based public health problems contribute to becoming a public leader. Explore the six levels of public health leadership through the practices of current and past public health leaders, case studies, and personal experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**NURSING 761 – HEALTH PROGRAM PLANNING, EVALUATION,  
AND QUALITY IMPROVEMENT**

3 credits.

Provides content in theory, concepts, and methods of program planning and evaluation in the context of health care and community health organizations. Provides basic concept related to designing and implementing health services quality improvement projects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 764 – NURSING AND HEALTH INFORMATICS**

3 credits.

Application of computer and information technologies to support nursing in the diagnosis and treatment of human responses to health, illness, and developmental challenges. Identification of information processing challenges and evaluation of informatics solutions. Ethical, legal and social issues related to informatics in patient care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022



### **NURSING/LAW/MED SC-M 768 – CONSUMER HEALTH ADVOCACY AND PATIENT-CENTERED CARE CLINICAL**

1-7 credits.

Interdisciplinary health advocacy clinical supervised by diverse professional staff. Provide broad advocacy to patients with life-threatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 772 – LEADERSHIP AND ORGANIZATIONAL DECISION-MAKING IN HEALTH CARE**

3 credits.

Provides healthcare leaders with the knowledge, skills, and competencies to improve patient, organization and health system outcomes. Effective organizational and systems leadership will help to eliminate health disparities and promote patient safety and excellence in practice. Includes the analysis, integration, and application of principles of leadership and management to healthcare organizations and to population-based efforts across the healthcare delivery system including a basic introduction to finance. Emphasis is placed on the practical skills needed to succeed as leaders in today's complex environments.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **NURSING 785 – FOUNDATIONS OF CURRICULUM DEVELOPMENT AND EVALUATION IN NURSING EDUCATION**

3 credits.

Examination and application of knowledge and skills related to curriculum planning, implementation, and evaluation for nursing education. Emphasis on history and philosophy of nursing curricula, models of curriculum and evaluation, and strategies for change and innovation.

**Requisites:** Declared in a Nursing graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **NURSING 786 – FOUNDATIONS OF TEACHING AND LEARNING IN NURSING**

3 credits.

Plan, implement, and evaluate teaching and learning strategies for nursing education within diverse settings and student populations.

**Requisites:** NURSING 785

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **NURSING 787 – NURSING EDUCATION PRACTICUM**

1-3 credits.

Application of knowledge and skills in the nurse educator role in selected educational environments (classroom, clinical, laboratory and/or communities). Includes discussion of instructional experiences and issues.

**Requisites:** NURSING 786

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING 798 – MASTER'S RESEARCH PRACTICUM**

3 credits.

Promotes learning of the research process in nursing through direct experience. Work closely with faculty to determine the nature, scope and design of the research experience. NURSING 700 or 701

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

### **NURSING 799 – INDEPENDENT STUDY**

1-6 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 802 – ETHICS AND THE RESPONSIBLE CONDUCT OF RESEARCH**

1 credit.

Ethical issues in the design, conduct and reporting of research are examined in the context of the nature of the scientific endeavor, the structure of the research community, and professional and federal guidelines for supporting scientific integrity and controlling misconduct.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **NURSING 803 – ADVANCED QUANTITATIVE DESIGN AND METHODS**

3 credits.

Focuses on the conduct of research primarily from empirical, analytical traditions. Address the integration of research paradigms, questions, designs, and methods for such research. Compare details, characteristics, strengths and limitations of alternative research designs and methods. Discuss issues and standards for preparing research proposals for different purposes (e.g., institutional review boards for human subjects, NIH) to advance the nursing discipline.

**Requisites:** Declared in Nursing PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 804 – ADVANCED QUALITATIVE DESIGN AND METHODS**

3 credits.

Focuses on how to conduct qualitative research. Content addressed the philosophical underpinnings of various interpretive qualitative methodologies to assist students in matching the best method to particular research questions. Engage in research procedures associated with various qualitative traditions.

**Requisites:** NURSING 803**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 805 – MEASUREMENT IN HEALTH RESEARCH**

3 credits.

Major issues in developing, testing, and using research instruments, including links between concepts, variables, and measures; theories of measurement and scaling, including reliability and validity testing; and using measures in research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 806 – EVALUATION AND APPLICATION OF EVIDENCE-BASED PRACTICE**

3 credits.

Evaluate collective evidence and apply it, as appropriate, as a basis for improving nursing practice, health care, and healthcare outcomes.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**NURSING 807 – GROUNDED THEORY RESEARCH**

3 credits.

A comprehensive understanding of the intellectual traditions that informed the development of grounded theory, variations of grounded theory (second generation), and to provide an opportunity for active participation in grounded theory research. Requires hands-on participation in a field-research project of the student's choice, engaging in data-collection and analysis, and in-depth readings in symbolic interaction and grounded theory method.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**NURSING 811 – ADVANCED PATHOPHYSIOLOGY**

3 credits.

In-depth study of selected physiological and pathophysiological concepts with application to advanced clinical practice across the lifespan.

**Requisites:** Declared in a Nursing graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 815 – KNOWLEDGE DEVELOPMENT IN NURSING**

3 credits.

Examination of the history of the discipline of nursing, with emphasis on the evolution of debates regarding what is known and how it is known.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**NURSING 816 – PROSEMINAR IN NURSING RESEARCH**

1 credit.

Focus on professional development and socialization to the role of nurse scientist. Topics emphasize development of career paths leading to productive research, scholarly publication / presentation, master teaching, and academic leadership. Discussion includes current topics in nursing research, especially as illustrated by the planned and ongoing research of graduate students and faculty in nursing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**NURSING 818 – PATIENT-CENTERED RESEARCH**

3 credits.

Addresses conceptual and methodological perspectives in how patient-centered research and family-centered care research is conducted, from the development through the testing and implementation of interventions. Attention is given to various conceptualizations of patient-centeredness, to the behavioral and physiological origins of patient-centered interventions, family-centered care interventions, and to the trajectory of testing such interventions, from descriptive studies to experimental trials.

**Requisites:** NURSING 815**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **NURSING 819 – CLINICAL FIELD PRACTICUM - RESEARCH IN HEALTH CARE SETTINGS**

3 credits.

A field experience in preparation for conducting clinical research in the health care setting that corresponds to the a chosen health problem, phenomenon, or population of interest. Engage as participants and observers in the care setting to deepen your knowledge of the selected health problem and to examine the application of theory and research in the care setting. Negotiate a field experience with a selected agency or institution. Includes discussion of instructional experiences and issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING 826 – FOUNDATIONS FOR APN CLINICAL PRACTICE III**

3 credits.

Advance knowledge for clinical decision-making. Coordination of complex care across systems and settings will be emphasized.

**Requisites:** NURSING 727 and 729

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING 828 – CLINICAL LEADERSHIP III**

1-4 credits.

A supervised clinical practice to enhance clinical leadership skills within the role of an Advanced Practice Nurse. Collaborate with a faculty course professor and clinical preceptor to meet individualized learning objectives.

**Requisites:** NURSING 729

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING 829 – CLINICAL LEADERSHIP IV**

1-4 credits.

A supervised clinical practice to enhance clinical leadership skills within the role of an Advanced Practice Nurse. Collaborate with a faculty course professor and clinical preceptor to meet individualized learning objectives.

**Requisites:** NURSING 828

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **NURSING 830 – LEADERSHIP, ROLE DEVELOPMENT, AND RESOURCE STEWARDSHIP PRACTICUM**

3 credits.

Expand and strengthen leadership skills, enhance understanding of specialized advanced practice role including strategic planning and resource stewardship. Collaborate with course faculty and designated preceptors to establish and achieve individualized learning goals that directly pertain to specialty roles in advanced nursing practice.

**Requisites:** NURSING 712, 713, and 847

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **NURSING 847 – HEALTH POLICY PRACTICUM**

3 credits.

Provides a policy field experience that corresponds to a targeted focus area, phenomenon, or population of interest. Negotiate a policy experience with a selected agency or institution. Analyze relevant policies to your population of interest and actively influence the design, development, and implementation of a policy. Examine strategies to accelerate policy adoption and implementation.

**Requisites:** Declared in a Nursing graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **NURSING/ED PSYCH/HDFS/SOC WORK 880 – PREVENTION SCIENCE**

3 credits.

This course provides a theoretical, empirical and practical foundation for prevention science as it relates to the prevention of human social problems. Research and evaluation methods, program design strategies, best practices and policy as they relate to the field of prevention are also examined. Intended for 2nd year graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **NURSING/ED PSYCH/HDFS/SOC WORK 881 – CAPSTONE SEMINAR IN PREVENTION SCIENCE**

1 credit.

This course provides an opportunity for students to meet with prevention professionals and scholars from across campus and the community to explore current and emerging issues of prevention research and professional practice. Students must complete HDFS/ED PSYCH/ NURSING/SOC WORK 880 before taking this course.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NURSING 906 – SCHOLARLY PROJECT**

1-4 credits.

Independent scholarly project involves a systematic, evidence-based approach to enhance health-related outcomes.

**Requisites:** NURSING 706 and 806

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**NURSING 990 – THESIS RESEARCH**

1-9 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NURSING 999 – ADVANCED INDEPENDENT STUDY**

1-9 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## NUTRITIONAL SCIENCES (NUTR SCI)

**NUTR SCI 132 – NUTRITION TODAY**

3 credits.

Nutrition and its relationship to humans and their biological, social, and physical environment; current issues and concerns that affect the nutritional status of various population groups.

**Requisites:** Not open to students with credit for NUTR SCI 332

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 200 – THE PROFESSIONS OF DIETETICS AND NUTRITION**

1 credit.

An overview of the nutrition and dietetics professions: career options; professional and portfolio development; professional references and resources; credentialing; and professional issues.

**Requisites:** Declared in Nutritional Sciences BS-Nutrition and Dietetics or classified as Pre-Nutritional Sciences BS-Nutrition and Dietetics

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/AGRONOMY/ENTOM 203 – INTRODUCTION TO GLOBAL HEALTH**

3 credits.

Introduces students to global health concepts through multidisciplinary speakers dedicated to improving health through their unique training. It targets students with an interest in public health and those who wish to learn how their field impacts their global issues.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work under direct guidance of a Nutritional Sciences faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2006

**NUTR SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Research work under direct guidance of a Nutritional Sciences faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI/AN SCI/DY SCI 311 – COMPARATIVE ANIMAL NUTRITION**

3 credits.

Nutrients and their source, assimilation, function and requirement.

**Requisites:** BMOLCHEM 314, CHEM 341, 343, or BIOCHEM 501

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 332 – HUMAN NUTRITIONAL NEEDS**

3 credits.

Biochemical and physiological basis of the nutritional requirements of humans.

**Requisites:** (CHEM 103, 109, or 115) and (BIOLOGY/BOTANY/ ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/ZOOLOGY/BIOLOGY 101, or BIOCORE 381)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/A A E/AGRONOMY 350 – WORLD HUNGER AND MALNUTRITION**

3 credits.

Hunger and poverty in developing countries and the United States. Topics include: nutrition and health, population, food production and availability, and income distribution and employment.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 375 – SPECIAL TOPICS**

1-4 credits.

Special topics on contemporary issues relevant to undergraduate students studying health and nutrition.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**NUTR SCI 377 – CULTURAL ASPECTS OF FOOD AND NUTRITION**

3 credits.

Exploration of cultural competency and humility as a factor in reducing nutrition-related health disparities, and an opportunity to foster community resilience within the United States. Analysis of how personal cultural perspectives can shape biases and stereotypes that can widen the health disparity gap. Principles of food and culture utilized to compare cultural perspectives of health and well-being, including influences of spirituality and religiosity on food choice and dietary patterns. Includes content collaborators and guest speakers from a variety of communities, and identities.

**Requisites:** None

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 379 – INTRODUCTION TO EPIDEMIOLOGY**

3 credits.

Provides undergraduate students of all disciplines with an introduction to the field of epidemiology. As the "detectives of public health," epidemiologists investigate the causes of disease, track outbreaks, screen and monitor the health of populations, and design studies to track health over time. Epidemiological research is used to identify groups at-risk for disease, guide public health programs and policies and generate hypotheses about the causes of diseases which can inform further research. Also examines association and causality, study design, and limitations to epidemiological evidence, drawing from real examples, both current and historical.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Breadth – Either Social Science or Natural Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

Internship under guidance of a Nutritional Sciences faculty or instructional academic staff member and internship site supervisor. Students are responsible for arranging the work and credits with the Nutritional Sciences faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**NUTR SCI 400 – STUDY ABROAD IN NUTRITIONAL SCIENCES**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**NUTR SCI/INTER-AG 421 – GLOBAL HEALTH FIELD EXPERIENCE**

1-4 credits.

Specialized educational experiences that address a broad range of global health topics through interdisciplinary approaches to health and include participation in applied public health activities or service learning projects with communities and partner organizations.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI 431 – NUTRITION IN THE LIFE SPAN**

3 credits.

Influence of nutrition on growth and development; physiological basis of nutritional requirements throughout the life span, including the relationship of food habits and nutrition to selected chronic diseases; principles of nutritional intervention in community programs.

**Requisites:** Junior standing, grade of C in ANAT&PHY 335 and grade of C in NUTR SCI 332

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 499 – CAPSTONE IN NUTRITION**

2 credits.

Capstone in the nutritional sciences, emphasis is on the integration of nutritional knowledge and the interpretation and application of nutrition-oriented research.

**Requisites:** NUTR SCI 431 and BIOCHEM/NUTR SCI/BIOCHEM 510 or concurrent enrollment

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**NUTR SCI 500 – UNDERGRADUATE CAPSTONE SEMINAR LABORATORY**

1 credit.

Current topics in Nutritional Sciences and undergraduate research presentations.

**Requisites:** NUTR SCI 431 and BIOCHEM/NUTR SCI/BIOCHEM 510 or concurrent enrollment

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/BIOCHEM 510 – NUTRITIONAL BIOCHEMISTRY AND METABOLISM**

3 credits.

Lectures in nutrition with a substantial background in biochemistry. Emphasis on biochemical and physiological fundamentals of nutrition. Discussion of protein, fat, carbohydrate, energy, minerals and vitamins and their roles and interrelationships in nutrition and metabolism.

**Requisites:** BIOCHEM 301, 501, 507, BMOLCHEM 503, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/KINES 525 – NUTRITION IN PHYSICAL ACTIVITY AND HEALTH**

3 credits.

Provides both scientific knowledge and application of nutrition related to exercise, health, and sports.

**Requisites:** ANAT&PHY 335

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 540 – COMMUNITY NUTRITION AND HEALTH EQUITY**

3 credits.

The foundations and practice of community nutrition and health equity. Factors and resources affecting community nutrition programs and delivery of nutrition and education programs to diverse communities and vulnerable populations.

**Requisites:** NUTR SCI 431 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 550 – NUTRITION AND COUNSELING FOR ATHLETIC PERFORMANCE**

2 credits.

Presents foundational principles and evidenced based recommendations for fueling active bodies and how proper nutrition relates to weight management, muscle development, recovery and performance. Integrates counseling methods and techniques used for working with active populations through readings, learning activities and expert guest lecturers. Features reading and interpreting scientific studies related to sports nutrition and interdisciplinary guest speakers representing sport performance and wellness programs.

**Requisites:** NUTR SCI 332

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 600 – INTRODUCTORY SEMINAR IN NUTRITION**

1 credit.

Presentation of reports from current journals of nutritional sciences.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**NUTR SCI/BIOCHEM 619 – ADVANCED NUTRITION:  
INTERMEDIARY METABOLISM OF MACRONUTRIENTS**

3 credits.

Discuss metabolic control; gastrointestinal physiology, nutrient absorption; molecular, cellular, organismal aspects of glucose transport, metabolism, regulation; fuel sensing; molecular regulation of fatty acid, lipid metabolism; cellular, organismal aspects of protein metabolism; hormonal control of metabolism; experimental approaches for studying metabolism.

**Requisites:** NUTRI SCI 510, BIOCHEM 507, 508, or BMOLCHEM 503 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/POP HLTH 621 – INTRODUCTION TO NUTRITIONAL  
EPIDEMIOLOGY**

1 credit.

Techniques used to evaluate relationships of diet to health and disease in human populations; integration of knowledge gained with results of animal and clinical studies toward understanding dietary risk or protective factors for disease. Includes advanced diet assessment and basic epidemiologic approaches.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**NUTR SCI 623 – ADVANCED NUTRITION: MINERALS**

1 credit.

Topics discussed in regard to minerals are: metabolic roles; absorption, excretion, transport and cellular metabolism; nutritional and toxicological standards for humans and animal models; bioavailability; genetic interactions; and research methodologies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 625 – ADVANCED NUTRITION: OBESITY AND DIABETES**

1 credit.

Physiology, biochemistry and genetics of human obesity and diabetes. Critical review of current research on their etiology and treatment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/AN SCI 626 – EXPERIMENTAL DIET DESIGN**

1 credit.

Discuss nutrient requirements, composition of ingredients used to meet requirements and the mathematical steps involved in diet formulation with emphasis on research animals and human subjects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**NUTR SCI 627 – ADVANCED NUTRITION: VITAMINS**

1 credit.

Scientific knowledge of the metabolic functions, metabolism and nutritional requirements for some of the water soluble vitamins and all of the fat soluble vitamins.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 631 – CLINICAL NUTRITION I**

3 credits.

Introduction to the nutrition care process, including pathology, medical nutrition therapy, and nutrition support in relation to alterations in nutrition and metabolism that accompany disease states. Research related to therapeutic nutrition.

**Requisites:** NUTR SCI 332, 431, and (BIOCHEM 301 or 501)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 632 – CLINICAL NUTRITION II**

3 credits.

Advanced topics surrounding pathology, medical nutrition therapy, and nutrition support in relation to alterations in nutrition and metabolism that accompany disease stated. Research related to therapeutic nutrition.

**Requisites:** NUTR SCI 631

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 641 – APPLICATIONS IN CLINICAL NUTRITION I**

1 credit.

Clinical problem solving, assessing medical record data, evaluating food intake, planning modified diets, and reviewing medical and research literature related to certain diseases/conditions. Develops critical thinking, teamwork and communication skills needed by the dietetic intern and dietitian.

**Requisites:** Declared in Nutritional Science BS or BS-Dietetics and Nutrition and NUTR SCI 631 or concurrent enrollment

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 642 – APPLICATIONS IN CLINICAL NUTRITION II**

1 credit.

Clinical problem solving, assessing medical record data, evaluating food intake, planning modified diets, and reviewing medical and research literature related to certain disease states/conditions. Develops critical thinking, teamwork and communication skills needed by the dietetic intern and dietitian.

**Requisites:** Declared in Nutritional Science BS or BS-Dietetics and Nutrition and NUTR SCI 631 or concurrent enrollment

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI/BIOCHEM 645 – MOLECULAR CONTROL OF METABOLISM AND METABOLIC DISEASE**

3 credits.

Examination of various physiological states and how they affect metabolic pathways. Discussion of a number of special topics related to the unique roles of various tissues and to metabolic pathways in disease states, including adipocyte biology, beta-cell biology, epigenetics, inflammation, and aging related diseases.

**Requisites:** BIOCHEM 501, 508 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 650 – ADVANCED CLINICAL NUTRITION: CRITICAL CARE AND NUTRITION SUPPORT**

3 credits.

Advanced study of the metabolic demands of critical illness and how these alterations influence the nutritional needs of critical care patients in various disease states. Using an evidence-based medical approach, students will assess nutrient requirements and determine best methods of nutrient delivery in various disease states. Anthropometric measures and hematological indices will be incorporated to assess nutritional status and monitor response to nutritional therapies.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 651 – ADVANCED CLINICAL NUTRITION - PEDIATRICS**

3 credits.

Pediatric nutritional requirements with emphasis on issues related to evidence-based medical nutrition therapy.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 652 – ADVANCED NUTRITION COUNSELING AND EDUCATION**

3 credits.

Application of current theories and techniques of counseling and education to the field of nutrition and dietetics. Practical application of communication techniques, client-centered counseling methods, motivational interviewing, learning theories and behavior change techniques, and factors affecting eating patterns. Nutrition psychology and the psychoanalytic approach to nutrition counseling will be emphasized in the class. Principles of group counseling/facilitation and instructional material/media design.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 653 – CLINICAL NUTRITION RESEARCH**

3 credits.

Research use and development as it applies to clinical nutrition practice: effective use of the literature in evidence based practice and research development, problem development, methodology, analysis and reporting of results and conclusions.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 655 – NUTRITION IN AGING**

3 credits.

Interpret research relating to nutrition during the aging process. Gain an understanding of acute and chronic conditions in older persons, both in hospital and the community. Examine the impact of aging on organ systems and address the relationship among physiologic aging, nutrition, and disease.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 657 – MANAGEMENT IN DIETETICS**

3 credits.

Evaluate research and apply management principles in dietetics practice. Enhance leadership and management skills for settings such as hospitals, long-term care facilities, schools, universities, prisons, and other locations where food and nutrition services are administered.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**NUTR SCI 670 – NUTRITION AND DIETETICS PRACTICUM I**

3 credits.

The first of two supervised practice experiences in nutrition and dietetics at University of Wisconsin Hospital and Clinics and affiliated sites. Dietetic interns apply their academic training, furthering their competency in: clinical nutrition, food systems management, research, and community experiences.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 671 – NUTRITION AND DIETETICS PRACTICUM II**

3 credits.

The second of two supervised practice experiences in nutrition and dietetics at University of Wisconsin Hospital and Clinics and affiliated sites. Dietetic interns apply their academic training, furthering their competency in: clinical nutrition, food systems management, research, and community experiences.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 675 – NUTRACEUTICALS FOR HEALTHCARE PROFESSIONALS**

1 credit.

Overview of the principles and processes necessary to evaluate and utilize bioactive food components and dietary supplements in practice, including federal regulations. Current scientific evidence supporting or refuting the biochemical and physiological efficacy of select bioactive food components and dietary supplements will be addressed.

**Requisites:** ANAT&PHY 335 and (BIOCHEM 301 or 501) or declared in the Capstone Certificate in Clinical Nutrition or Clinical Nutrition MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**NUTR SCI 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study and research for students completing theses under direct guidance of a Nutritional Science faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**NUTR SCI 682 – SENIOR HONORS THESIS**

2-4 credits.

Individual study and research for students completing theses under direct guidance of a Nutritional Science faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**NUTR SCI 691 – SENIOR THESIS-NUTRITION**

1-4 credits.

Individual study and research for students completing theses under direct guidance of a Nutritional Science faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**NUTR SCI 692 – SENIOR THESIS**

1-4 credits.

Individual study and research for students completing theses under direct guidance of a Nutritional Science faculty or instructional academic staff member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**NUTR SCI 699 – SPECIAL PROBLEMS**

1-3 credits.

Directed study under direct guidance of a Nutritional Science faculty member or instructional academic staff member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI 710 – HUMAN ENERGY METABOLISM**

2 credits.

Fundamentals in human macronutrient metabolism and its role in health and disease. Biochemistry and physiology of macronutrient digestion, anabolism, and catabolism. Disorders of energy metabolism (obesity, type 1 and type 2 diabetes, starvation). Metabolic effects of fiber and the microbiota. Body composition and energy assessment. Taught in an online format using lectures, guided readings, and projects.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 711 – PERSONALIZED NUTRITION: GENETICS, GENOMICS, AND METAGENOMICS**

1 credit.

Genetic factors that modulate the relationships between diet, health, and disease risks, including the effects of differences in our genetic makeup (Nutrigenetics), the regulation of gene expression by nutrients and dietary patterns (Nutrigenomics), and the interactions between diet, gut microbiome, and human hosts (Metagenomics).

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 715 – MICRONUTRIENTS: HUMAN PHYSIOLOGY AND DISEASE**

3 credits.

Micronutrients explores the function of vitamins and essential mineral nutrients from the biochemical and nutritional perspective with emphasis on issues essential for clinical nutrition.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 720 – ADVANCED NUTRITION ASSESSMENT**

1 credit.

Advanced skills and evolving methods of nutritional assessment. Measurement and interpretation of physical examination and laboratory parameters. Diagnosing malnutrition and nutrient deficiencies, including clinical characteristics used to identify and label the degree of malnutrition.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 721 – NUTRITION INFORMATICS**

1 credit.

The emerging role of the electronic storage, retrieval and dissemination of food and nutrition related data and the effective use of information for problem solving and decision-making for the dietetics professional.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 725 – ADVANCED COMMUNITY NUTRITION**

1 credit.

Community nutrition as it applies to clinical nutrition practice: programs, resources and issues supporting clinical nutrition practice in the community.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 726 – NUTRITIONAL MANAGEMENT OF GASTROINTESTINAL DISORDERS**

3 credits.

Highlights the important interaction between nutrition and the human gastrointestinal tract (GI). Includes exploration of various gastrointestinal related disorders and diseases, and covers contemporary issues, current research, and real-life examples applicable to the field of nutrition, and nutrition providers. Includes instruction from content collaborators and GI nutrition experts. Apply the pathophysiology of GI disorders and disease, deconstruct differential diagnoses; and describe current medical management and dietary requirements of an individual and translate this into appropriate medical nutritional therapy.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**NUTR SCI 731 – RESEARCH IN PROGRESS SEMINAR**

1 credit.

Seminars on topics in nutritional sciences of interest to Nutritional Sciences dissertators and reports on doctoral student research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 745 – GRANT WRITING FOR NUTRITIONAL SCIENCES RESEARCH**

2 credits.

Interactively address the knowledge, approach, and professional skills (conceptual, technical, and writing) required to create a successful grant proposal and initiate a career in research. Format is focused on the planning and completion of NIH-style grant proposals. Lectures and workshops will address the development of long term goals, hypotheses, and specific aims, as well as research design and methodology. Basic guidelines and approaches to proposal review and scoring are also covered. Several key components of a grant proposal will be generated using an iterative and peer-supported process.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**NUTR SCI 750 – ADVANCED SPORTS NUTRITION**

2 credits.

Integration of foundational nutrition and exercise physiology principles with sports nutrition concepts from a clinical perspective. Evaluation of the unique nutritional requirements for athletes/active individuals on body composition, performance, and timing of nutrients and hydration related to pre-activity, during activity, and post-activity recovery. Application of these concepts with clinical conditions requiring specialized sports nutrition approaches such as diabetes, gastrointestinal disorders, eating disorders, micronutrients deficiencies and life cycle populations (youth/adolescent, pregnant and masters' athletes). Analysis of sports nutrition research to utilize evidenced-based practice and recommendations around ergogenic aids/supplements and other sports nutrition topics.

**Requisites:** Declared in Clinical Nutrition MS or the Capstone Certificate in Clinical Nutrition

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**NUTR SCI 799 – PRACTICUM IN NUTRITIONAL SCIENCES TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**NUTR SCI 875 – SPECIAL TOPICS**

1-4 credits.

Special topics on contemporary issues relevant to graduate students studying health and nutrition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI 881 – SEMINAR-TOPICS IN HUMAN AND CLINICAL NUTRITION**

1 credit.

Varied topics in clinical and human nutrition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI/BIOCHEM 901 – SEMINAR-NUTRITION AND METABOLISM (ADVANCED)**

1 credit.

Presentation of original research results; discussion of recent articles in animal metabolism and nutrition.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**NUTR SCI 931 – SEMINAR-NUTRITION**

1 credit.

Seminar features expert presentations of current research and issue-based applications that represent the breadth of nutritional sciences; topics investigate problems "from molecules to communities".

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI 991 – RESEARCH NUTRITION**

1-12 credits.

Independent research with assigned instructor. Research projects determined by agreement between instructor and student.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**NUTR SCI 993 – INDEPENDENT STUDY IN NUTRITION**

1-12 credits.

Independent research with assigned instructor. Research projects determined by agreement between instructor and student.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

## OBSTETRICS AND GYNECOLOGY (OBS&GYN)

**OBS&GYN 699 – DIRECTED STUDY**

1-5 credits.

Directed study projects as arranged with faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**OBS&GYN 710 – REPRODUCTIVE ENDOCRINE PHYSIOLOGY**

3 credits.

A broad grounding in reproductive endocrine physiology at the graduate level, with an emphasis on human and human reproductive health wherever possible. Encompasses an overview of fundamental concepts in endocrinology, the hypothalamic-pituitary axis, steroidogenesis, early embryonic development, pregnancy and maternal-fetal adaptations, and pathologies associated with endocrine disruption and dysregulation. Provides more focus on pathologic pregnancies because such pregnancies lead to a higher risk of adult onset diseases including hypertension, obesity, and metabolic syndrome. Covers pregnancy and pathologic pregnancy in detail.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**OBS&GYN 711 – ADVANCED REPRODUCTIVE ENDOCRINE PHYSIOLOGY**

2 credits.

Advanced learning opportunities in Endocrinology and Reproductive Physiology (ERP) areas, particularly reproduction, with an emphasis on human health whenever possible. Explore scientific questions core to the ERP graduate training program at research level with further in-depth instruction and a focus on cutting-edge knowledge and developments. Topics include pregnancy (ovulation through parturition); embryonic growth and development; lactation biology; and neuroendocrinology. Continuation of OBS&GYN 710. Intended for second- or third-year graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OBS&GYN 712 – CRITICAL THINKING IN REPRODUCTIVE ENDOCRINE PHYSIOLOGY**

2 credits.

Provides advanced learning opportunities in Endocrinology and Reproductive Physiology areas, particularly reproduction, emphasizing human health whenever possible. Explores scientific questions core to the ERP graduate training program and teaches how to communicate research findings as presentations. Skills developed include information discovery; organization of papers and identification of argument(s); and creation of documents/reports. Students are the driving force behind achievement of the learning objectives by undertaking learning activities, actively engaging in their peers' activities, and providing constructive feedback to their peers. Prior completion of OBS&GYN 710 recommended but not required.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**OBS&GYN/POP HLTH 807 – REPRODUCTIVE AND PERINATAL EPIDEMIOLOGY**

2 credits.

Provides an overview of the current knowledge and research in reproductive and perinatal epidemiology. Through reading of the primary and secondary literature, examine issues related to topics such as fertility, preconception health, and perinatal outcomes including maternal morbidity and mortality, pregnancy loss, and infant outcomes. Current evidence-based strategies designed to improve reproductive and perinatal outcomes are reviewed. Long-term health implications of pregnancy and infant health are considered.

**Requisites:** POP HLTH/SOC/POP HLTH 797**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**OBS&GYN 909 – OBSTETRICS & GYNECOLOGY INTERNSHIP PREP COURSE**

1 credit.

Designed to highlight, review, and allow practice of key concepts in Obstetrics Gynecology. Practice with case simulation, case discussion, didactics, panel discussions, and procedural skills to prepare for success in the first few weeks of an Ob/Gyn residency. Participate in simulations and explore critical interplay between medical care and communication. Discuss common challenges encountered early in residency and throughout an Obstetrics Gynecology career. Taught by a team of faculty, inter-professional staff, residents, fellows, and course directors.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OBS&GYN 910 – INDEPENDENT READING AND RESEARCH IN OB/GYN**

2-8 credits.

Independent research under the direct supervision of Obstetric/Gynecology faculty. Each student's research project is individualized to meet student research goals within context of faculty research needs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



### **OBS&GYN 917 – RACE IN AMERICAN OBSTETRICS & GYNECOLOGY**

2 credits.

Survey the history of race in American obstetrics and gynecology. Gain understanding of how race and theories of racial difference informed the development of the field and justified the treatment of Black, indigenous and immigrant patients. Understand the vital contributions of Black enslaved women, other women of color, and Irish immigrants to obstetrics and gynecology. Make connections between racialized historical practices and contemporary norms in reproductive healthcare.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **OBS&GYN 919 – INDIVIDUALIZED OBSTETRICS & GYNECOLOGY ELECTIVE**

2-4 credits.

In-depth exposure to ambulatory gynecology, operative gynecology, normal and high-risk obstetrics and subspecialty clinics, working under the direct supervision of Obstetric/Gynecology faculty, residents, fellows, certified midwives, and advanced practice practitioners. Individualized to meet each location's capacity and student preference.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **OBS&GYN 921 – GYNECOLOGIC ONCOLOGY**

2-4 credits.

In-depth exposure to outpatient care of the patient with gynecologic cancer. Occasional opportunities to provide inpatient care to patients students have examined or consulted with in clinic. Work under the direct supervision of the gynecologic oncology faculty, fellows, residents, and APPs. Function at the intern level and play an active role in the care of gynecologic oncology patients.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **OBS&GYN 934 – OBSTETRIC HOSPITALIST**

4 credits.

In-depth exposure to inpatient care of patients on Labor and Delivery. Work under the direct supervision of the Obstetrics Hospitalist whose primary role is the general medical care of hospitalized patients. Help manage laboring patients, see patients in labor and delivery, triage, and assist with cesarean sections. Round on all patients for whom you are involved in care once patients are post-partum. Function as the residents do at night and assist with cross coverage of inpatient gynecology patients as well as see patients who arrive in the emergency department with obstetric or gynecologic concerns. You may assist in the operating room if the patients who present to the emergency room require immediate surgery.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **OBS&GYN 935 – TEACHING IN THE CLINICAL SETTING**

2 credits.

As Phase 3 students, apply teaching theories to the pursuit of improving the clinical learning environment for Phase 2 students. Unique opportunity for Phase 3 medical students to gain experience with clinical teaching in a capacity similar to how they will function as an intern without the demands and responsibilities of residency, with a focus on establishing good teaching practices. Spend time in the clinical setting advising and mentoring Phase 2 students. No direct participation in patient care. Prepare and deliver short teaching sessions for Phase 2 students from a standard curriculum of learning topics to help Phase 2 students achieve success on Labor Delivery. Develop innovative ways to guide Phase 2 students to effectively utilize clinical resources, navigate the basics of patient assessment, and engage with the patient care team.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **OBS&GYN 938 – OBSTETRICS & GYNECOLOGY INPATIENT ACTING INTERNSHIP**

4 credits.

Provides an in-depth exposure to inpatient and operative management of complicated obstetric and gynecologic patients. Work under the direct supervision of a senior resident, fellows and the obstetrician-gynecology faculty. Provides an opportunity to function at the intern level and play an active role in inpatient management of obstetric and gynecologic patients.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OBS&GYN/AN SCI/ZOOLOGY 954 – SEMINAR IN ENDOCRINOLOGY-REPRODUCTIVE PHYSIOLOGY**

0-1 credits.

Promotes scientific and professional development. Presenters develop and deliver research presentations to a scientific audience, field questions, and receive critiques about their presentation style and scientific approach. Additional presentations include professional development, career advancement opportunities, and topics of interest to the endocrinology and reproduction community at large.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**OBS&GYN 955 – RESPONSIBLE CONDUCT OF RESEARCH FOR BIOMEDICAL GRADUATE STUDENTS**

2 credits.

Meets the NIH Institutional Training Grant requirements of repeat/further instruction in the nine recommended areas (1) conflict of interest - personal, professional, and financial; (2) policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices; (3) mentor/mentee responsibilities and relationships; (4) collaborative research including collaborations with industry; (5) peer review; (6) data acquisition and laboratory tools, and management, sharing and ownership; (7) research misconduct and policies for handling misconduct; (8) responsible authorship and publication; (9) the scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**OBS&GYN 956 – ADVANCED RESPONSIBLE CONDUCT OF RESEARCH FOR BIOMEDICAL STUDENTS**

1 credit.

Meets the NIH Institutional Training Grant requirements of repeat/further instruction in the nine recommended areas (1) conflict of interest - personal, professional, and financial; (2) policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices; (3) mentor/mentee responsibilities and relationships; (4) collaborative research including collaborations with industry; (5) peer review; (6) data acquisition and laboratory tools, and management, sharing and ownership; (7) research misconduct and policies for handling misconduct; (8) responsible authorship and publication; (9) the scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research. Provides advanced consideration of these topics and illustrates how to implement these responsible conduct and ethical considerations into actual grant- and career-related documents.

**Requisites:** OBS&GYN 955, PHARMACY 800, NURSING 802, SURG SCI 812, or MICROBIO 901**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OBS&GYN 990 – RESEARCH**

1-10 credits.

Research supervised by individual faculty members.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## OCCUPATIONAL THERAPY (DEPARTMENT OF KINESIOLOGY) (OCC THER)

**OCC THER 100 – ORIENTATION TO OCCUPATIONAL THERAPY**

1 credit.

An opportunity to explore occupational therapy as a potential career; introduction to the general concepts of human occupation and adaptation; survey of OT practice settings and clinical groups.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**OCC THER/L I S/NURSING 517 – DIGITAL HEALTH: INFORMATION AND TECHNOLOGIES SUPPORTING CONSUMERS AND PATIENTS**

3 credits.

Increases student understanding of appropriate and accurate materials for consumer health and family education; the ethical and organizational policy issues that arise when providing consumer and family health information in different settings; the role of the public media in disseminating health information; the health-related information needs and preferences of racial/ethnic minority populations. It also provides an introduction to health information technologies, from search engines to websites to apps, that put people in charge of managing their own health information.

**Requisites:** Junior standing**Course Designation:** Breadth - Social Science Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**OCC THER 610 – PROFESSIONAL SKILLS I: PROFESSIONAL PRACTICE IN OCCUPATIONAL THERAPY**

2 credits.

The nature of professionalism and the development of the profession of occupational therapy; professional ethics; settings in which occupational therapists practice; the therapeutic process including principles of testing and measurement and documentation as these relate to occupational therapy practice.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019

**OCC THER 611 – PROFESSIONAL SKILLS II: COMMUNICATION & INTERPERSONAL SKILLS IN OT**

2 credits.

Communication with clients in occupational therapy, collaboration with other professionals about patient care and communicating with the public about occupational therapy; group dynamics and functional groups in occupational therapy; issues of culture and difference related to occupational therapy practice.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**OCC THER 612 – PROFESSIONAL SKILLS III: ORGANIZATION AND MANAGEMENT IN OT PRACTICE**

3 credits.

Principles and practices of organization and management and their application in both traditional and innovative occupational therapy practice settings.

**Requisites:** Declared in Occupational Therapy MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**OCC THER 613 – PROFESSIONAL SKILLS IV: COMMUNITY-BASED OT PRACTICE**

2 credits.

Knowledge and skills related to the practice of occupational therapy in innovative practice settings including occupation-based program planning and grant writing. Addresses issues related to career development in occupational therapy.

**Requisites:** Declared in Occupational Therapy MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**OCC THER 620 – OCCUPATIONAL-BASED THEORY AND PRACTICE**

2 credits.

Theories of human occupation. Research related to the form, function, and meaning of daily occupations for the individual and society.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**OCC THER 621 – ASSESSMENT OF OCCUPATIONAL PARTICIPATION**

3 credits.

Skills required for assessment of occupational participation in various settings including the demands inherent in occupations, an individual's capacity to participate in the occupation, and environmental factors constraining and supporting participation.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**OCC THER 622 – INFANT AND CHILDHOOD OCCUPATIONS AND THERAPEUTIC INTERVENTIONS**

4 credits.

Current research, theory, and core concepts relating to the therapeutic use of occupations to facilitate participation of children with disabilities and their families in everyday routines within their communities.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**OCC THER 623 – ADOLESCENT AND YOUNG ADULT OCCUPATIONS AND THERAPEUTIC INTERVENTIONS**

4 credits.

Theoretical foundations of occupational science related to occupational participation typically encountered during the adolescent and young adult years including the development of occupational engagement, conditions that may disrupt occupational roles, assessment, and therapeutic intervention processes.

**Requisites:** Declared in Occupational Therapy MS**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**OCC THER 624 – MIDDLE AND LATE ADULTHOOD OCCUPATIONS AND THERAPEUTIC INTERVENTIONS**

4 credits.

Theoretical foundations of occupational science as related to occupational participation typically encountered during the middle and late adulthood including the development of occupational engagement, conditions that may disrupt occupational roles, assessment, and therapeutic intervention processes.

**Requisites:** Declared in Occupational Therapy OTD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021

**OCC THER 625 – LEVEL-I FIELDWORK: INFANTS AND CHILDREN**

1 credit.

Supervised clinical experience involving occupational therapy practice with children.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**OCC THER 626 – LEVEL-I FIELDWORK: ADOLESCENTS AND YOUNG ADULTS**

1 credit.

Supervised clinical experience involving occupational therapy practice with adolescents and young adults.

**Requisites:** Declared in Occupational Therapy MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**OCC THER 627 – LEVEL-I FIELDWORK: MIDDLE AND LATE ADULthood**

1 credit.

Supervised clinical experience involving occupational therapy practice with adults and elders.

**Requisites:** Declared in Occupational Therapy MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**OCC THER 629 – MEDICAL LECTURES FOR OCCUPATIONAL THERAPY**

2 credits.

The study of medical and surgical management of individuals with a variety of orthopedic and neurological conditions relevant to occupational therapy practice. Lectures are presented by UW Hospital medical staff and occupational therapists experienced in the treatment of these conditions.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**OCC THER 640 – APPLIED NEUROANATOMY FOR ALLIED HEALTH PROFESSIONALS**

3 credits.

Overview of neuroanatomical structures relevant for students in allied health professional training who work with clinical populations. The anatomical regions deemed most significant to practice, given current understandings of the brain and its function, will be explored. The primary focus is on the anatomical regions, neurophysiology, and resultant observable phenomenology related to human function as well as practical clinical application and current research findings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 650 – ENABLING OCCUPATIONS: INTRODUCTION**

2 credits.

Provides an introduction to theory development in occupational therapy, activity analysis, functional mobility and one model of occupational therapy practice. Application of knowledge of gross human anatomy to assess movement in the context of occupation.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 651 – CLINICAL CONDITIONS I**

1 credit.

An in-depth look at the most common clinical diagnoses relevant to occupational therapy practice with an adolescent and adult population. Covers diagnoses particularly found in physical disability contexts.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 652 – CLINICAL CONDITIONS II**

1 credit.

An in-depth look at the most common clinical diagnoses relevant to occupational therapy practice with a focus on pediatric and mental health practice settings.

**Requisites:** OCC THER 651

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 662 – LEVEL II FIELDWORK A**

6 credits.

Conduct evaluations and provide treatment under supervision for an assigned caseload in an approved practice setting to meet minimal competencies for independent practice.

**Requisites:** Declared in Occupational Therapy MS or Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 664 – LEVEL II FIELDWORK B**

6 credits.

Conduct evaluations and provide treatment under supervision for an assigned caseload in an approved practice setting to meet minimal competencies for independent practice.

**Requisites:** Declared in Occupational Therapy MS or Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**OCC THER 671 – SCIENTIFIC INQUIRY IN OT I: EVIDENCE-BASED PRACTICE.**

2 credits.

Addresses the role of evidence in supporting occupational therapy practice. Covers the concepts, methods, and strategies related to evidence-based practice. Encourages the development of critical reading and writing skills.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**OCC THER 672 – SCIENTIFIC INQUIRY IN OCCUPATIONAL THERAPY II: RESEARCH DESIGN AND METHODS**

2 credits.

Supports the generation and use of evidence in occupational therapy practice. Provides an overview of research design with particular relevance to understanding human occupation and the practice of occupational therapy.

**Requisites:** Declared in Occupational Therapy MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**OCC THER 673 – SCIENTIFIC INQUIRY IN OT III: DATA COLLECTION AND ANALYSIS.**

3 credits.

Supports the development of a research proposal and the skills needed to implement a research project.

**Requisites:** Declared in Occupational Therapy MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**OCC THER 674 – SCIENTIFIC INQUIRY IN OT IV: SCIENTIFIC WRITING FOR PUBLICATION**

2 credits.

Supports the completion of a proposed research project with emphasis on interpretation and dissemination of findings.

**Requisites:** Declared in Occupational Therapy MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**OCC THER 710 – PROFESSIONAL AND LEADERSHIP SKILLS 1: FOUNDATIONS**

2 credits.

Addresses the foundations and basic tenets of occupational therapy; and explores the process, domain and parameters of practice. Topics include the history and development of the profession; occupational therapy organizations; certification and licensing; behaviors and responsibilities of occupational therapists; professional ethics; liability; and guidelines and laws governing practice. The Occupational Therapy Practice Framework and selected models, approaches and theoretical frames of reference are explored.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 711 – PROFESSIONAL AND LEADERSHIP SKILLS 2: EFFECTIVE INTERPROFESSIONAL RELATIONSHIPS**

2 credits.

Covers respectful and effective communication with all stakeholders for occupational therapy service provision, including clients, caregivers, colleagues, community members and third party payers. Introduces team and group dynamics

**Requisites:** OCC THER 710

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 712 – PROFESSIONAL AND LEADERSHIP SKILLS 3: MANAGEMENT**

2 credits.

Covers business and management aspects of occupational therapy practice, including leadership skills needed for administrative roles and interprofessional leadership in a variety of settings.

**Requisites:** OCC THER 711

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**OCC THER 722 – ENABLING OCCUPATIONS 1: ADULT FOCUS**

4 credits.

Introduce clinical assessment and therapeutic intervention strategies to promote occupational participation and health among adult clients with a focus on orthopedics and medical considerations. Application of skills learned in real-world settings.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 723 – ENABLING OCCUPATIONS 2: ADULT FOCUS**

4 credits.

Advance practice skills across the continuum of care among adult clients. Focus on clinical assessment, therapeutic intervention, and discharge planning to promote occupational participation and health. Application of skills learned in real-world settings.

**Requisites:** OCC THER 722

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 724 – ENABLING OCCUPATIONS 3: MENTAL HEALTH ACROSS THE LIFE SPAN**

3 credits.

Learn foundational skills necessary to promote, prevent and treat the mental health and psychosocial needs of clients, groups and populations. Topics include: Recovery, mental health and psychosocial assessments and treatments of common mental health disorders and health and wellness promotion.

**Requisites:** OCC THER 723

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 725 – ENABLING OCCUPATIONS 4: PEDIATRICS**

5 credits.

Foundations of pediatric occupational therapy practice including theory and core concepts; models of practice and service delivery; the assessment and treatment process; and alterations in performance components, skills, and participation for children and adolescents with various conditions will be discussed

**Requisites:** OCC THER 724

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 726 – LEVEL 1 FIELDWORK A: ADULT PHYSICAL DISABILITIES**

1 credit.

Exposure to clinical occupational therapy practice through observation, participation in guided evaluation and treatment procedures, data collection and organization, and communication with clients and other professionals while working in clinical setting under supervision of licensed occupational therapist.

**Requisites:** Concurrent enrollment in OCC THER 723 is required

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 727 – LEVEL 1 FIELDWORK B: COMMUNITY-BASED MENTAL HEALTH**

1 credit.

Exposure to community-based mental health OT practice through observation, participation in guided evaluation and treatment procedures, data collection and organization, and communication with clients and other professionals.

**Requisites:** OCC THER 726 and concurrent enrollment in OCC THER 724

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 728 – LEVEL 1 FIELDWORK C: PEDIATRICS**

1 credit.

Exposure to pediatric OT practice through observation, participation in guided evaluation and treatment procedures, data collection and organization, and communication with clients and other professionals.

**Requisites:** OCC THER 727 and concurrent enrollment in OCC THER 725

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



### **OCC THER 731 – LIVING WELL: WELLNESS PROMOTION FOR GRADUATE STUDENTS**

1 credit.

Promote students' wellness as they manage graduate school and its demands. Examines health and well-being related to students' time-use patterns; balance among daily activities; daily routines and habits; circadian rhythms; meaningful moments; sleep; and social connections.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **OCC THER 732 – LIVING WELL: DESIGNING OCCUPATION-BASED WELLNESS PROMOTION**

2 credits.

Gain a complex understanding of the form, function and meaning of daily occupations and the role they play in lifestyle change for wellness promotion. Learn the architecture of daily life including its biological and sociocultural foundations for patterning occupational rounds in order to promote and sustain motivation to change.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **OCC THER 733 – PROMOTING HEALTH AND WELLNESS FOR POPULATIONS**

2 credits.

Explores population-based intervention for occupational justice, health and wellness. Provides a basic set of competencies in the domains central to the field of public health including systems thinking, social determinants of health, and health care reform policy.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **OCC THER 734 – LIVING WELL: OCCUPATION-BASED INTERVENTIONS PROMOTING HEALTH AND WELLNESS**

2 credits.

Critically analyze the rigor and evidence supporting current occupation-based interventions for populations served by occupational therapists, create a professional presentation based on this research, and create materials to translate this information for consumer use. Understand key issues and current occupational science trends in fostering access to and equitable participation in occupations.

**Requisites:** Declared in Occupational Therapy: Entry-Level, OTD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **OCC THER 770 – EVIDENCE BASED PRACTICE LAB PRACTICUM**

2 credits.

Designed to provide an overview of the research happening within the OT program at UW-Madison and to provide hands-on, mentored experience with generating evidence for practice.

**Requisites:** OCC THER 771 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

### **OCC THER 771 – EVIDENCE BASED PRACTICE 1: BASICS**

3 credits.

Provides the opportunity to establish or advance understanding of evidence-based practice through critical exploration of research ethics and approaches. Critically review literature relevant to occupational therapy and determine how research findings can inform practice. First in the evidence-based practice sequence leading to the development of a proposal and completion of a scholarly study.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **OCC THER 772 – EVIDENCE BASED PRACTICE 2: RESEARCH DESIGN, METHODS, AND ANALYSIS**

3 credits.

Supports the development of a research proposal and the skills needed to implement a research project. Develop a research proposal and analyze data to inform practice in occupational therapy. Second in the evidence-based practice sequence leading to the development of a proposal and completion of a scholarly study.

**Requisites:** OCC THER 771

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **OCC THER 773 – EVIDENCE BASED PRACTICE 3: RESEARCH TRANSLATION**

3 credits.

Supports the completion of a scholarly study and the skills needed to translate research to practice. Through a series of lectures, statistics/writing consultations, and mentored research, students complete and publicly present their scholarly work.

**Requisites:** OCC THER 772

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 811 – APPLIED LEADERSHIP AND MANAGEMENT IN OT**  
3 credits.

Overview of the historical, theoretical and current practices of leadership, management and advocacy in health care, education and social service settings. Includes a reflective analysis of the student's own leadership and management style. Apply key principles of effective networking, collaboration and interdisciplinary practice to further develop leadership competencies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 812 – CURRENT TRENDS SHAPING OCCUPATIONAL THERAPY PRACTICE**  
3 credits.

Occupational therapy's role in the history and continuing evolution of health care, education, and social welfare. Discussion of the theoretical, evidence, and policy trends influencing occupational therapy practice across settings. Emphasizes development of leadership skills for shaping, advocating and guiding occupational therapy through a continually evolving practice landscape.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 813 – ADVANCED PRACTICE IN INTERPROFESSIONAL CONTEXTS**  
3 credits.

Differentiate and define the role of occupational therapy, other professions, and the client in inter-professional practice (IP). Describe models of IP collaborative practice, evaluate evidence supporting effective IP interventions, generate and implement strategies for an IP team to improve quality of services.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**OCC THER 814 – COMMUNICATING OT TO INTERPROFESSIONAL AUDIENCES**  
3 credits.

Learn the necessary skills for effectively designing and implementing professional presentations in a variety of interprofessional contexts including educational settings, professional conferences, practice workshops, and scholarly contributions. Review and critique communication from various media.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 821 – CASE SYNTHESIS 1**  
1 credit.

Synthesize learning from previous coursework and apply to cases in a comprehensive way using problem-based learning strategies with an assigned learning group.

**Requisites:** Declared in Occupational Therapy OTD: Entry Level

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 822 – CASE SYNTHESIS 2**  
2 credits.

Facilitate learning for peers around cases. Develop a learning case based on fieldwork experience. Synthesize learning from previous coursework with an emphasis on advocacy and population health and apply to cases in a comprehensive way using problem-based learning strategies with an assigned learning group.

**Requisites:** OCC THER 821

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**OCC THER 865 – ASSISTIVE TECHNOLOGY IN PRACTICE**  
1 credit.

Examines the use of assistive technologies in practice including principles of assessment and design, a survey of devices and their appropriate application, common problems or barriers to effective use, and policy and funding issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**OCC THER 871 – APPLICATION OF OCCUPATIONAL THERAPY EVIDENCE IN THE PRACTICE ENVIRONMENT**  
2 credits.

Examine and apply to a specific intervention or topic that is relevant to professional development goals and/or capstone project. Leverage appropriate methodologies, analytic tools and procedural reasoning in support of recommendations regarding the application of the intervention or approach in the practice environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**OCC THER 872 – USING INFORMATION TO OPTIMIZE PRACTICE**

3 credits.

An introduction to application of informatics in practice including appropriate design, data management procedures and statistical analysis tools. Pursue a practice-relevant question which can be answered using available data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**OCC THER 873 – ADVANCED OUTCOME MEASUREMENT IN OCCUPATIONAL THERAPY**

3 credits.

Explore quality assurance in OT service delivery (including consumer satisfaction) and objective and subjective functional and occupational performance measures of OT interventions. Includes review of principles of measurement (reliability, validity and clinical utility). Examines general themes and trends in healthcare outcomes measurement and research as well as issues germane to specific areas of OT practice. Learn strategies and skills for assessing the psychometric properties and clinical utility of a variety of outcomes measures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OCC THER 880 – INTRODUCTION TO CAPSTONE**

1 credit.

Introduces capstone experience and project including providing a step-by-step guide for the development, planning, implementation and dissemination of the entry-level and post-professional occupational therapy doctoral capstone experience and project.

**Requisites:** Declared in Occupational Therapy graduate programs

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 881 – CAPSTONE PROJECT I**

3 credits.

Prepares for Capstone Project Proposal and learning plan for experiential setting connected to proposed project. Complete a problem statement, needs assessment, literature review and plans and implementation methods.

**Requisites:** OCC THER 880

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OCC THER 882 – CAPSTONE PROJECT II**

3 credits.

Complete implementation of individual Capstone Project, analyze the findings and prepare a written and oral presentation of the Capstone Project, as described and approved by the Primary Mentoring Committee.

**Requisites:** OCC THER 881

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OCC THER 883 – DOCTORAL EXPERIENTIAL COMPONENT**

6 credits.

An advanced placement that provides an opportunity for applied experiences within their concentration area.

**Requisites:** OCC THER 664

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**OCC THER 890 – INTER-PROFESSIONAL DEVELOPMENT FOR LEADERSHIP**

1-3 credits.

Content design specific to student's curriculum plan to enhance knowledge of occupational therapy in global arenas, across service delivery systems and in inter-professional contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**ONCOLOGY (ONCOLOGY)****ONCOLOGY 401 – INTRODUCTION TO EXPERIMENTAL ONCOLOGY**

2 credits.

Biological processes associated with and characteristic of neoplasia.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ONCOLOGY/MICROBIO 545 – TOPICS IN BIOTECHNOLOGY**

1 credit.

Seminars on current topics in agricultural, medical, and industrial biotechnology such as: microbiological production of food, drink, biopharmaceuticals; production methods, genetic engineering (vectors, recombination cloning), continuous fermentation; bioconversion processes and production of chemicals from biomass; plant biotechnology; transgenic animals.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383, or BOTANY/BIOLOGY/BOTANY 130) and (CHEM 104 or 109) or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ONCOLOGY/M&ENVTOX/PHM SCI/PHMCOL-M/POP HLTH 625 – TOXICOLOGY I**

3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

**Requisites:** (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or (BIOCORE 485 486)) and PATH 404; or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ONCOLOGY/PL PATH 640 – GENERAL VIROLOGY-MULTIPLICATION OF VIRUSES**

3 credits.

Bacterial and animal viruses, their structure, multiplication, and genetics.

**Requisites:** (GENETICS 466 or 467) and (BIOCHEM 501 or 508) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ONCOLOGY 673 – PURIFICATION AND CHARACTERIZATION OF PROTEIN AND PROTEIN COMPLEXES**

2 credits.

The theory and practice of protein purification. Topics covered include conventional and recent protein fractionation techniques; enzyme assays, handling, and characterization; purification strategy; and overproduction of cloned gene products. The emphasis is on micro and laboratory scale purifications.

**Requisites:** BIOCHEM 508, CHEM 511 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ONCOLOGY 675 – ADVANCED OR SPECIAL TOPICS IN CANCER RESEARCH**

1-3 credits.

Examines special topics in cancer research. Topics and content will vary each semester and by section of the course.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ONCOLOGY 699 – SPECIAL RESEARCH PROBLEMS**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ONCOLOGY 703 – CARCINOGENESIS AND TUMOR CELL BIOLOGY**

3 credits.

Viral, chemical, and physical factors involved in tumor formation in humans and experimental animals; biology and biochemistry of neoplasia, both in vivo and in vitro.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ONCOLOGY 715 – ETHICS IN SCIENCE**

1 credit.

A review and discussion of the fundamentals of ethical issues in science.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ONCOLOGY 725 – READINGS IN CANCER BIOLOGY**

2 credits.

A review and discussion of the current literature on topics related to cancer biology. The emphasis is on the development of skills in data analysis, critical interpretation, and clear writing.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ONCOLOGY 735 – CURRENT PROBLEMS IN CANCER BIOLOGY**

2 credits.

Emphasis is on the development of skills in data analysis and interpretation, grant proposal writing, and oral presentation to help prepare students for their Preliminary Exam.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**ONCOLOGY 745 – MODELING HUMAN DISEASE IN ANIMALS**

1 credit.

Provides a background in the use of animals in the study of human disease and hands-on exposure to common techniques such as tissue collection and processing, surgeries, imaging, and other manipulations. Lectures by basic scientists and clinicians will provide background about each of the organ systems or diseases and the ethics of animal research. Prior to start of course, completion of online animal safety training. Instructions will be provided after enrollment.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**ONCOLOGY 778 – BIOINFORMATICS FOR BIOLOGISTS**

3 credits.

Become familiar with bioinformatics theory and principles. Provides real-world experience that can be applied to your own work. Provides a foundation of knowledge that can be used to critically evaluate existing bioinformatics tools that can be used in your work, and in the absence of an appropriate tool, identify the analyses that demand the development of novel tools.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**ONCOLOGY 901 – SEMINAR**

1 credit.

Critical review of selected topics in cancer research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ONCOLOGY 990 – RESEARCH**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## OPERATIONS AND TECHNOLOGY MANAGEMENT (OTM)

**OTM 300 – OPERATIONS MANAGEMENT**

3 credits.

Managing operations is about people, information, equipment, and materials and how these are combined to produce and/or deliver goods and services to customers. Emphasis is on how systems and processes can be designed, managed, and improved to achieve operations excellence and competitive advantage.

**Requisites:** Sophomore standing or declared in undergraduate Business Exchange program**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM 351 – PRINCIPLES AND TECHNIQUES OF QUALITY MANAGEMENT**

3 credits.

Introduces students to the terminology, concepts, principles, and techniques for managing and improving quality.

**Requisites:** Sophomore standing and OTM 300**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM 365 – CONTEMPORARY TOPICS**

1-3 credits.

An exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing and OTM 300**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**OTM 370 – SUSTAINABLE APPROACHES TO SYSTEM IMPROVEMENT**

3 credits.

Organizations employ a variety of improvement approaches to develop sustainable practices. Sustainability concerns such as natural capital, emission buildup, and base of the pyramid are directly addressed by examining innovative system-improvement concepts, while simultaneously strengthening mission-central concerns such as cost, quality, customer, market, revenue, profit, brand, reputation sourcing, and quality of work life.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Summer 2022

**OTM 399 – READING AND RESEARCH-OPERATIONS AND INFORMATION MANAGEMENT**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**OTM/MARKETNG 421 – FUNDAMENTALS OF SUPPLY CHAIN MANAGEMENT**

3 credits.

Supply chain management (SCM) is a dynamic, cross-functional discipline that encompasses the areas of strategy, product development/innovation, marketing, finance, sourcing, production, logistics, and technology in both product and service industries. The supply chain is responsible for the sustainable and efficient movement of products, services, funds, and data along the value chain. Companies must effectively coordinate these functions not only within the firm, but with business partners and customers around the world. SCM is a critical, strategic component of any business or organization, from high-tech to healthcare, and it is a fundamental knowledge base for any student of business.

**Requisites:** Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM/MARKETNG 422 – LOGISTICS MANAGEMENT**

3 credits.

Provides a management perspective on the fundamental activities, concepts, and current practices in logistics. Transportation management, order fulfillment, warehousing, global logistics, key performance indicators, outsourcing, and introduction to radio frequency identification and barcoding. Use of case studies and industry speakers.

**Requisites:** MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM/MARKETNG 423 – PROCUREMENT AND SUPPLY MANAGEMENT**

3 credits.

Procurement and supply management is the business function concerned with an organization's acquisition of required materials, services, and equipment. Explores the key aspects of modern supply management including the purchasing process, cost management, negotiation, sourcing strategies, supplier management, category management, acquisition methods for materials and services, and outsourcing.

**Requisites:** Sophomore standing and (MARKETNG 300 or OTM 300) or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM/MARKETNG 427 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS**

3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.

**Requisites:** MARKETNG 300, OTM 300, and sophomore standing, or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM/MARKETNG 428 – SUPPLY CHAIN CAPITAL MANAGEMENT**

3 credits.

Introduce the set of activities and solutions available to finance an organization's supply chain infrastructure. Define and study the related influencers. Investigate risks and mitigation techniques relative to associated metrics and strategies. Analyze multiple cases in group study work. Identify and recommend improvement opportunities.

**Requisites:** Junior standing and (MARKETNG 300 or OTM 300), or declared in the Business Exchange program

**Repeatable for Credit:** No

**OTM 451 – SERVICE OPERATIONS MANAGEMENT**

3 credits.

Application of operations management principles to the analysis of service-delivery systems in profit and nonprofit organizations. Topics include designing service-delivery systems, location and layout, operations planning and control, yield management, technology and information systems, and service quality management.

**Requisites:** OTM 300

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM 452 – PROJECT MANAGEMENT**

3 credits.

During their careers, managers spend a significant amount of time either participating in or leading projects. While every project is unique, some concepts and tools in project management apply to a wide range of projects. The aim of this course is to equip students with these concepts and tools, and to develop them into successful project managers (and team members). With that aim in mind, the course will emphasize quantitative aspects of project management while also discussing more qualitative aspects. Key topics include Project Initiation, Scheduling, Resource Management, Monitoring, Valuation, Rework, Agile Project Management, Project Management Analytics and Contracting.

**Requisites:** Sophomore standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**OTM 453 – OPERATIONS ANALYTICS**

3 credits.

Focuses on the application of analytical methodologies to problems that arise in the context of a company's operations and supply chains. Touches on all three dimensions of analytics (descriptive, predictive, and prescriptive). Emphasis on data and real industry data collected from the university, alumni, and executive board members when possible. Explore, analyze, and utilize such data in a hands-on way, using a variety of software tools. Significantly driven by a set of case problems as opposed to systematic coverage of methodologies.

**Requisites:** OTM 300 and GEN BUS 306**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM/ISYE/MATH/STAT 632 – INTRODUCTION TO STOCHASTIC PROCESSES**

3 credits.

Topics include discrete-time Markov chains, Poisson point processes, continuous-time Markov chains, and renewal processes. Applications to queueing, branching, and other models in science, engineering and business.

**Requisites:** (MATH/STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM 654 – PRODUCTION PLANNING AND CONTROL**

2-3 credits.

The role of materials and capacity planning and control in business operations. Manufacturing Resource Planning Systems: aggregate planning, material requirements planning, capacity planning, operations scheduling. Procedures for cellular manufacturing systems. Costing issues in modern planning and control systems.

**Requisites:** Sophomore standing and OTM 300**Repeatable for Credit:** No**Last Taught:** Spring 2022**OTM 700 – OPERATIONS MANAGEMENT**

2-3 credits.

Management of operations throughout an organization. Emphasizes the coordination of resources to improve cost, quality, and customer service. Topics include capacity and materials management, operations strategy, and process improvement.

**Requisites:** Declared in an MBA program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**OTM 701 – PRODUCT MANAGEMENT**

2-3 credits.

Introduction to both the technical and interpersonal sides of developing and managing a product, from ideation to application and revision and launch. Key tools and frameworks including agile software development, product road mapping and design thinking are included.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM 702 – DIGITAL STRATEGY**

2 credits.

Helps develop the critical thinking skills necessary to assess how digitization shapes business strategy, innovation, and operations in firms. Prepares students to analyze and evaluate business challenges for maximizing the impact of digitization on products, processes, and services in different settings.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OTM 703 – COMPETING THROUGH ANALYTICS**

2 credits.

Introduction to business analytics, machine learning and artificial intelligence from a managerial perspective. Covers identifying opportunities to capture data, learning about the current trends in and possibilities with data mining, converting analytics insights into action and evaluating your organization's readiness to compete with analytics.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**OTM 714 – SUPPLY CHAIN ANALYTICS**

2-3 credits.

The ability to extract information from data has become essential for companies that want to remain competitive - and therefore essential for students aspiring to become successful managers. Provides an understanding of various analytics methodologies and concepts, and the ability to apply these to business problems related to supply chain management and operations management. Key topics include Data Visualization, Time Series Forecasting, Linear Regression, Classification Methods, Association Rules, Cluster Analysis and Text Mining.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**OTM/MARKETNG 722 – LOGISTICS MANAGEMENT**

2-3 credits.

A foundation in transportation, order fulfillment, warehousing, materials planning including MRP, demand planning, import/export fundamentals, ERP systems, supply chain metrics, and leading supply chain technologies such as RFID.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM/MARKETNG 724 – STRATEGIC GLOBAL SOURCING**

3 credits.

Supply management (procurement) is widely recognized as one of the most critical elements in global supply chain management. The function plays a major role in maximizing the value and the integration of supply chain operations. Explores the key aspects of modern supply management including functional responsibilities and exemplary practices for major industry sectors.

**Requisites:** Graduate/professional standing and (MARKETNG 300 and OTM 300) or (MARKETNG 700 and OTM 700)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM/MARKETNG 726 – SUPPLY CHAIN STRATEGY**

3 credits.

Focuses on strategic issues and current theory and practice in supply chain management. Effective design and management of supply chain resources is a key source of competitive advantage for organizations. Supply chain management is a cross-functional discipline that concentrates on the management of goods, services, and information among all links in the value chain.

**Requisites:** (MARKETNG 300 and OTM 300) or (MARKETNG 700 and OTM 700) and graduate/professional standing, or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM/MARKETNG 727 – INFORMATION TECHNOLOGY IN SUPPLY CHAINS**

3 credits.

Explores the concepts and practices of using information technology to effectively manage and operate supply chains of businesses and other organizations. Topics include supply chain processes, enterprise resource planning (ERP) system implementation, and supply chain simulations using SAP software.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM/MARKETNG 728 – SUPPLY CHAIN CAPITAL MANAGEMENT**

3 credits.

Supply chain capital management refers to the set of activities and solutions available to finance an organization's supply chain infrastructure. As supply chains become more extended and complicated a need has developed to both manage and fund the supply network. Define and study the various influencers on the supply chain capital structure. Investigate risks, mitigation techniques, metrics and themes relating to the topic.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**OTM 732 – ECONOMICS FOR MANAGERS**

2-3 credits.

Develops and applies economic principles to examine the effect of firm, industry, domestic and global market conditions on both day-to-day managerial decision-making and long-term strategic planning.

**Requisites:** Declared in an MBA program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM 751 – SERVICE OPERATIONS MANAGEMENT**

3 credits.

Application of operations management principles to the analysis of service-delivery systems in profit and nonprofit organizations. Topics include designing service-delivery systems, location and layout, operations planning and control, yield management, technology and information systems, and service quality management.

**Requisites:** OTM 700 and GEN BUS 704

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM 752 – PROJECT MANAGEMENT**

1-3 credits.

During their careers, managers spend a significant amount of time either participating in or leading projects. While every project is unique, some concepts and tools in project management apply to a wide range of projects. Equips students with these concepts and tools, and to develop them into successful project managers (and team members). Focuses on broadly applicable concepts and methods and will cover both qualitative and quantitative aspects of project management. Key topics include Project Initiation, Scheduling, Resource Management, Monitoring, Valuation, Risk Management, Agile Project Management, Project Portfolio Management and Contracting.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM 753 – HEALTHCARE OPERATIONS MANAGEMENT**

2-3 credits.

Healthcare delivery systems around the world struggle with three fundamental issues: patient access to care, quality and safety in the care process (including patient and staff satisfaction), and cost of care. These issues will be examined along with selected analysis and improvement approaches that the discipline of Operations Management can offer. Different types of both clinical and non-clinical processes in hospital settings are illustrated.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**OTM 758 – MANAGING TECHNOLOGICAL AND ORGANIZATIONAL CHANGE**

3 credits.

Issues surrounding strategic decisions to adopt new technologies and modern improvement philosophies, the impact these will have on the organization and its members, obstacles preventing successful implementations, and the effective management of change processes. Change triggered by process technologies, and models of change management, form the core of the course.

**Requisites:** OTM 700

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM 760 – MANAGING BY DESIGN**

2-3 credits.

Exploration of design as a new practice in management that serves the need for identifying innovation opportunities in all types of organizations. Includes readings and cases in design/management and a set of creative projects that advance design skills in the context of management.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**OTM 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**OTM 770 – SUSTAINABLE APPROACHES TO SYSTEM IMPROVEMENT**

4 credits.

Innovative system-improvement concepts and approaches that sustainably strengthen mission-central concerns such as quality, cost, customers, markets, revenue, profit, brand, reputation, sourcing, quality of work life, natural capital, buildup of concentrations and base of the pyramid.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**OTM/E P D/GEN BUS 784 – PROJECT MANAGEMENT ESSENTIALS**

1 credit.

Techniques that will help to plan, execute, and deliver projects with desired scope on time and on budget. Learn to document clear project objectives and goals, accurately estimate project time and costs, schedule and allocate time-critical resources, and establish feedback systems for optimal project control.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**OTM 799 – READING AND RESEARCH-OPERATIONS AND INFORMATION MANAGEMENT**

1-6 credits.

Individual work suited to the needs of graduate students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**OTM 861 – STRATEGIC SYSTEMS AND SUSTAINABILITY**

3 credits.

Innovative concepts and methodology that embed sustainability into strategic organizational systems.

**Requisites:** OTM 770

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**OTM 990 – OPERATIONS AND INFORMATION MANAGEMENT-  
INDEPENDENT RESEARCH PH.D. THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**OTM 999 – READING AND RESEARCH-OPERATIONS AND  
INFORMATION MANAGEMENT PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**OPHTHALMOLOGY  
AND VISUAL SCIENCES  
(OPHTHALM)****OPHTHALM 699 – DIRECTED STUDY**

1-5 credits.

Directed study projects as arranged with faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**OPHTHALM 750 – OCULAR DISEASES OF THE MAMMALIAN  
VISION SYSTEM**

3 credits.

An integrated approach to basic aspects of the mammalian visual system from anatomy and molecular/cellular biology to current and future therapeutic treatments of common ocular disorders. Seven general areas being covered include development and anatomy of the eye, physiology of the visual system, immunology and ocular surface diseases, retinal diseases, glaucoma, and translational approaches to vision research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OPHTHALM 910 – INDEPENDENT READING AND RESEARCH FOR  
FOURTH YEAR MEDICAL STUDENTS**

2-8 credits.

Independent research under the direct supervision of Ophthalmology faculty. Each student's research project is individualized to meet student research goals within context of faculty research needs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**OPHTHALM 911 – INTRODUCTION TO THE VISUAL SYSTEM**

4 credits.

Become familiar with the basic science within ophthalmology. Comprehensive analysis of four common ophthalmic diseases, including ocular surface infections and immunology, glaucoma, diabetic retinopathy, and age-related macular degeneration.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**OPHTHALM 919 – INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE  
IN OPHTHALMOLOGY**

2-4 credits.

In-depth exposure to ambulatory ophthalmology, operative ophthalmology, subspecialty clinics, working under the direct supervision of Ophthalmology faculty, residents, fellows. Complete other patient care related learning activities as assigned by instructors (e.g., literature reviews, presentations on specific topics); these are dependent on the individual student, attending physician, and clinical site. Each student's schedule individualized to meet each location's capacity and student preference.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PATHO-BIOLOGICAL  
SCIENCES (PATH-BIO)****PATH-BIO 150 – CONTEMPORARY TOPICS AND CAREERS IN THE  
VETERINARY SCIENCES**

1 credit.

Topics of importance to the animal health field.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PATH-BIO/PATH 210 – HIV: SEX, SOCIETY AND SCIENCE**

3 credits.

HIV kills three million people per year, more than any other infectious disease. We will learn about the transmission, immunology, virology, vaccinology and societal impact of this virus. Six of the world's leading HIV scientists will give guest lectures.

**Requisites:** None**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PATH-BIO 299 – INDEPENDENT STUDY**

1-3 credits.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PATH-BIO/ENTOM/M M & I/ZOOLOGY 350 – PARASITOLOGY**

3 credits.

The biology of water-borne, food-borne, soil-borne and vector-borne parasites of animals including humans. Parasites are explored in the context of transmission, associated disease, diagnosis and treatment options, and environmental, cultural and socioeconomic drivers of disease epidemiology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY 153, or BIOCORE 381**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH-BIO/MED HIST 370 – ADDRESSING CONTROVERSY: THE SCIENCE, ETHICS, AND PUBLIC DISCUSSION OF ANIMAL RESEARCH**

3 credits.

Addresses the science, ethics, history, and communication strategies associated with the use of animals in research. Seeks to identify and employ common ground among those with different perspectives to enable students to make good decisions about this contentious topic.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Gen Ed – Communication Part B Breadth – Either Humanities or Natural Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH-BIO 510 – VETERINARY IMMUNOLOGY**

3 credits.

Current concepts in basic and clinical immunology with special emphasis on domesticated species and aspects of immunology.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PATH-BIO 512 – INTRODUCTION TO VETERINARY EPIDEMIOLOGY**

2 credits.

Learn basic concepts and approaches to population problems in veterinary medicine. Methods appropriate to investigation of disease outbreaks, surveillance of animal disease and production and the design of epidemiological studies of the determinants of disease are presented.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PATH-BIO 513 – VETERINARY VIROLOGY**

2 credits.

Introduction to basic concepts in virology and covers biology and pathogenesis of viral diseases of animals with an emphasis on viruses important to veterinary medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PATH-BIO 514 – VETERINARY PARASITOLOGY**

3 credits.

Basic veterinary parasitology with emphasis on biology, diagnosis, pathophysiology, treatment and management of parasitic infections of veterinary importance.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH-BIO 515 – REGULATORY VETERINARY MEDICINE AND PUBLIC HEALTH**

2 credits.

Role and regulatory obligations of the veterinary profession in preventing zoonoses, understanding the need for judicious use of antibiotics, and promoting the safety of food of animal origin.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PATH-BIO 517 – VETERINARY BACTERIOLOGY AND MYCOLOGY**  
4 credits.

Emphasis on the pathogenesis of bacterial and fungal diseases of animals. Become familiar with the methods used to identify representative bacterial and fungal pathogens.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PATH-BIO 525 – ACTIVE, INTEGRATED LEARNING I**  
1 credit.

Active Learning experience highlighting problem solving and critical thinking that horizontally and vertically integrates material from other veterinary medicine courses by using exercises constructed in the context of clinical cases or scenarios.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PATH-BIO 526 – ACTIVE, INTEGRATED LEARNING II**  
1 credit.

Active Learning experience highlighting problem solving and critical thinking that horizontally and vertically integrates material from other veterinary medicine courses by using exercises constructed in the context of clinical cases or scenarios.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH-BIO/M M & I 528 – IMMUNOLOGY**  
3 credits.

Development and functions of immune response in animals; a comprehensive study of experimental humoral and cellular immunity.

**Requisites:** (CHEM 104 or CHEM 109) and (BIOLOGY/ZOOLOGY/ BIOLOGY 101, BIOLOGY/ZOOLOGY/BIOLOGY/BOTANY 151 or BIOCORE 383), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PATH-BIO 559 – VETERINARY GENERAL PATHOLOGY**  
2 credits.

General mechanisms of disease at the cellular, tissue, organ, and organismal levels. Cell injury and cell death, neoplasia, inflammation, circulation, and genetics.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PATH-BIO 560 – VETERINARY SYSTEMIC PATHOLOGY I**  
2 credits.

Morphological manifestations of disease in animals. Diseases and disease processes will be discussed by organ system, stressing important diseases in domestic animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PATH-BIO 561 – VETERINARY SYSTEMIC PATHOLOGY II**  
4 credits.

Morphological manifestations of disease in animals. Diseases and disease processes will be discussed by organ system, stressing important diseases in domestic animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH-BIO 562 – VETERINARY CLINICAL PATHOLOGY**  
4 credits.

Concepts and techniques of clinical pathology with emphasis on those procedures that are important in the diagnosis of animal diseases.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH-BIO 660 – VETERINARY NECROPSY ROTATION**  
2 credits.

Provides experience with necropsy procedures in all animal species and in developing interpretive skills by participating in the School of Veterinary Medicine/Veterinary Medical Teaching Hospital diagnostic anatomic pathology service under the guidance of the faculty.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH-BIO 675 – SPECIAL TOPICS**  
1-5 credits.

Topics vary.

**Requisites:** Declared in Doctor of Veterinary Medicine

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PATH-BIO 681 – SENIOR HONORS THESIS I**  
2-4 credits.

Individual research and study in pathobiological sciences for completing an honors thesis as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**PATH-BIO 682 – SENIOR HONORS THESIS II**

2-4 credits.

Individual research and study in pathobiological sciences for completing an honors thesis as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**PATH-BIO 699 – DIRECTED STUDY**

1-5 credits.

Projects in the laboratory and/or through library work in specific subject area under the direct guidance of faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PATH-BIO/M M & I 720 – ADVANCED IMMUNOLOGY: CRITICAL THINKING**

3 credits.

Advanced focus on current questions in immunological research. Explores immunology topics including genetic, cellular, and molecular features of immune system fundamental to regulation of immune responses.

**Requisites:** M M I/PATH-BIO/M M & I 528 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**PATH-BIO/M M & I 750 – HOST-PARASITE RELATIONSHIPS IN VERTEBRATE VIRAL DISEASE**

3 credits.

Detailed study of the pathogenesis of vertebrate viral disease, stressing viral invasion, dissemination, mechanisms of disease production and resistance, and transmission.

**Requisites:** (ONCOLOGY/PL PATH/ONCOLOGY 640 or PATH-BIO 513), M M I/PATH-BIO/M M & I 528, and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH-BIO 775 – EXTERNSHIP**

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PATH-BIO 799 – PRACTICUM IN VETERINARY SCIENCE TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**PATH-BIO 920 – THESIS RESEARCH SEMINAR**

1 credit.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**PATH-BIO 930 – ADVANCED SEMINAR**

1 credit.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PATH-BIO 990 – RESEARCH**

1-12 credits.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## PATHOLOGY AND LABORATORY MEDICINE (PATH)

**PATH/PATH-BIO 210 – HIV: SEX, SOCIETY AND SCIENCE**

3 credits.

HIV kills three million people per year, more than any other infectious disease. We will learn about the transmission, immunology, virology, vaccinology and societal impact of this virus. Six of the world's leading HIV scientists will give guest lectures.

**Requisites:** None**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PATH 399 – INDEPENDENT STUDY**

1-4 credits.

Directed study projects for freshmen and sophomores.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PATH 404 – PATHOPHYSIOLOGIC PRINCIPLES OF HUMAN DISEASES**

3 credits.

Provides a basic understanding of the causes, pathophysiology, pathology and clinical manifestations of disease states from a medical perspective.

**Requisites:** ANAT&PHY 335 or 435 (or PHYSIOL 335 or 435 prior to Fall 2018)**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH/M&ENVTOX/PHM SCI/PHM COL-M/POP HLTH 626 – TOXICOLOGY II**

3 credits.

Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

**Requisites:** MENVTOX/ONCOLOGY/PHM COL-M/PHM SCI/POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHM COL-M 625**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH 699 – INDEPENDENT STUDY**

1-4 credits.

Directed study projects for juniors and seniors.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PATH 750 – CELLULAR AND MOLECULAR BIOLOGY/PATHOLOGY**

2-3 credits.

The emphasis is on our current understanding of molecular and cellular mechanisms. Wherever possible, human diseases are used to illustrate the outcome at the organismal level of defects in these mechanisms. Lectures will draw from the current research literature and cover topics such as cell and tissue organization, intracellular sorting, cell migration and growth. Students in Cellular and Molecular Pathology graduate program must enroll for lectures, 2 credits and discussion section, 1 credit. All other students should enroll for lecture only, 2 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PATH 751 – BIOLOGY OF AGING**

2 credits.

Examines the molecular, cellular, physiological, and clinical aspects of aging beyond basic biology in a biomedical/clinical research setting. Aging and age-related diseases are examined via the combined expertise of basic scientists and clinicians covering a range of topics directly relevant to biology of aging research, including the clinical perspective, the research perspective, and the integration of the two.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PATH 755 – RESPONSIBLE CONDUCT IN RESEARCH: RESEARCH ETHICS, RIGOR, REPRODUCIBILITY AND TRANSPARENCY**

2 credits.

Meets the NIH Institutional Training Grant requirements covering all ten of targeted areas in biomedical research. Subject matter incorporates the following topics for instruction: 1) Conflict of interest - personal, professional, and financial; 2) Policies regarding human subjects, and rigor and reproducibility in clinical research; 3) Policies regarding live vertebrate animal subjects, rigor and reproducibility and transparency in pre-clinical research, and safe laboratory practices; 4) Mentor and mentee responsibilities and relationships; 5) Collaborative research including collaborations with industry; 6) Peer review; 7) Data acquisition and laboratory tools (management, sharing and ownership); 8) Research misconduct and policies for handling misconduct; 9) Responsible authorship and publication; 10) The scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **PATH 802 – HISTOPATHOLOGY FOR TRANSLATIONAL SCIENTISTS**

3 credits.

Introduces the pathogenesis of disease via integration of actual autopsy patient cases. Emphasis is placed on understanding the basic mechanisms of disease at the level of cell, organ, and body, as well as the morphologic expression patterns of selected common specific disease processes. Participate in autopsy gross organ conferences as well as microscopic review sessions. Concepts covered in lectures will be applied and reinforced in the interactive autopsy sessions. Observe at least one full autopsy, gaining a three-dimensional understanding of structure and disease.

**Requisites:** Declared in Cellular and Molecular Pathology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PATH 803 – PATHOGENESIS OF MAJOR HUMAN DISEASES**

3 credits.

This course will focus on disease pathogenesis and discussion of the leading disease research model. Throughout the course, we will combine expert clinicians, basic scientists, and literature review on specific major diseases.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PATH 807 – IMMUNOPATHOLOGY: THE IMMUNE SYSTEM IN HEALTH AND DISEASE**

2 credits.

Gain fundamental knowledge of immunopathology and molecular immunology medicine, and have an in-depth research experience that combines pathobiological and translational immunology research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **PATH 809 – MOLECULAR MECHANISMS OF DISEASE**

2 credits.

Focuses on molecular mechanisms of diseases. Course will focus on four modules: Neuroscience, cancer biology, growth factor/matrix biology, and immunology. Course will consist of a one hour lecture and a one hour group discussion.

**Requisites:** Declared in Cellular and Molecular Pathology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PATH 900 – SEMINAR**

0 credits.

Weekly Seminar for graduate students, professional students, medical professionals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PATH 901 – STUDENT SEMINAR / JOURNAL CLUB**

1 credit.

Review of current publications on relevant topics selected by department faculty and trainer.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PATH 913 – TECHNIQUES IN VIROLOGY**

4 credits.

Culture-based methods for detecting and quantifying viruses. Describe concepts such as viral load, transmissibility, tissue tropism, host immune responses, and the effectiveness of various antiviral therapies. Perform multiple techniques for working with and quantifying viruses. Compare and contrast various methods of detecting and quantifying viruses.

**Requisites:** MED SCI-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **PATH 914 – CLINICAL MICROBIOLOGY: PHENOTYPIC IDENTIFICATION OF COMMON ORGANISMS**

2 credits.

Clinical microbiology lab practice, with a focus on identification of bacteria, fungi, and parasites. Learn techniques in specimen collection, staining, and plating. Gain an understanding of culture media, incubation, isolation, and microscopic and colony characteristics.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **PATH 915 – CLINICAL MICROBIOLOGY: OVERVIEW OF TECHNOLOGIES AND METHODOLOGIES**

2 credits.

Learn the variety of techniques, methodologies, and instrumentation used in modern clinical microbiology laboratory practice. Gain an understanding of mass spectrometry, NAAT, PCR, sequencing, antigen/antibody detection, antimicrobial susceptibility testing, point-of-care testing, and biomarkers of infection.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PATH 916 – CLINICAL MICROBIOLOGY: ANTIMICROBIAL RESISTANCE AND EMERGING PATHOGENS**

2 credits.

Understand the battle between humans and infectious diseases. Learn how microbes evade the immune system and develop resistance to antibiotics. Discuss emerging pathogens and multidrug resistant organisms and the techniques used to combat them.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PATH 920 – GENERAL PATHOLOGY CLERKSHIP**

2-4 credits.

Understand the central role that diagnostic pathology and laboratory testing play in medical care in all specialties. Review your course work in anatomic and clinical Pathology and add to your fund of knowledge. Familiarize yourself with the workings of a busy diagnostic tissue laboratory. Participate in daily "clinical-pathologist" discussions concerning the effects of various pathological conditions as they relate to specific clinical problems. Understand the role of anatomic and clinical pathology as they contribute to the understanding of disease processes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PATH 921 – TRANSFUSION MEDICINE CUSTOMIZED**

2 credits.

Maximize preparedness for residency by correlating basic science concepts with practical decision-making in clinical transfusion medicine. Tested topics are customized based on the student's specialty interests. Topics include hemostasis, immunology of transfusions, transfusion reactions, red blood cell (RBC) antigens and antibodies, product modifications, lab tests, indications, therapeutic apheresis, blood donation, special patient populations and circumstances such as obstetrics or neonates, and massive transfusion in surgery and trauma.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 922 – LABORATORY MEDICINE CUSTOMIZED**

2 credits.

Learn the basic science principles of common laboratory tests. Apply this knowledge to assignments in which you make clinical judgments and answer common patient questions about lab test interpretations. Customize the curriculum based on your specialty interests.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 923 – SICKLE CELL DISEASE AND PUBLIC HEALTH**

2 credits.

Patients with sickle cell disease can present to any medical specialty with manifestations or complications of the disease. Using a disease-focused biopsychosocial approach, the goal is the identification and understanding of barriers to health and the potential opportunities for improvement. The topics surveyed include: 1) clinical review, 2) community voices, 3) diversity, equity, and inclusion, 4) practical communication skills, 5) actionable examples of quality improvement, 6) health care systems, 7) economics, 8) global health, 9) ethics, and 10) advocacy via intellectual persuasion.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 926 – PATHOLOGY: CLINICAL MICROBIOLOGY-MARSHFIELD**

2-12 credits.

Clinical elective for fourth year medical students.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PATH 949 – GENETICS THROUGH THE LIFE CYCLE**

4 credits.

The genome impacts human health and disease from the moment of conception throughout growth, development, and aging. This course offers a comprehensive overview of clinical laboratory testing in the fields of medical genetics and public health. Topics include how genetic testing is integrated into patient care, including prenatal genetics, newborn screening, genetic testing in children and adults, and oncology genetics. Students will develop a strong foundational knowledge of basic genetics principles, identify indications for genetic testing, interpret population screening results and the implications for public health, assess the utility of diagnostic testing, and recognize the limitations of genetic testing and clinical laboratory medicine. It is anticipated that students will incorporate these concepts, knowledge, experiences, and evidence in their future clinical practice.

**Requisites:** Declared in Medicine program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 950 – INFECTIOUS DISEASE DETECTIVES**

2 credits.

In much of the world, infection remains the leading cause of disease and death. While medicine has made great strides in the diagnosis and treatment of infection, new and deadly pathogens continue to emerge, and antibiotic resistance continues to grow. No matter what a physician's specialty, understanding principals of infectious disease manifestations, diagnosis and treatment are key.

**Requisites:** Declared in the Medical program with 4th year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 960 – PATHOLOGY FOR SURGEONS**

2 credits.

The surgeon-pathologist relationship is an integral aspect of the surgical care process. The intraoperative and postoperative findings of the pathologist confirm that the appropriate course of action was taken, and this information determines what the surgeon will tell the patient and his or her family about the disease entity, prognosis, and recommended next steps. In this basic science selective, future surgeons will have the opportunity to refresh their understanding of essential anatomy and histology, and deepen their knowledge of disease pathophysiology. They will also engage in multiple practical learning activities such as cutting a frozen section, working up a transfusion reaction, staining and interpreting an FNA cytology slide, assisting in prosecting (grossing) surgical pathology and autopsy specimens and following up on the diagnosis/molecular testing/tumor board discussion to enhance their understanding of the pathologist's critical role in managing surgical patients.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 962 – THE MOLECULAR BASIS OF HEMATOLOGIC MALIGNANCIES**

2 credits.

Understanding molecular mechanisms of hematologic disease, and developing a foundation in the principles of relevant molecular assays, is critical to providing appropriate patient care. Topics include bases of neoplastic disorders of the hematopoietic and lymphoid systems, how underlying molecular abnormalities contribute to the pathophysiology of these diseases, and the evolving spectrum of molecular and cytogenetic/FISH testing and other ancillary testing (such as flow cytometry), which are often utilized in the work-up of hematopoietic and lymphoid malignancies. Learn about strengths and weaknesses of these technologies, and how pathologists integrate results of molecular testing with the traditional histologic exam to produce accurate diagnoses and drive clinical decision making. Develop an understanding of how knowing the underlying molecular pathology of a hematopoietic or lymphoid malignancy can inform prognosis and guide therapy.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 963 – WOMEN'S GLOBAL HEALTH: A FOCUS ON WOMEN'S CANCERS AND PUBLIC HEALTH INTERVENTIONS**

2 credits.

Unique opportunity for fourth year medical students to develop an intervention project focused on women's health and cancer prevention, diagnosis, treatment, or awareness globally and locally. Explore how women's health is influenced by both biological and sociocultural factors. Observe components of diagnosis of women's related cancers. Analyze molecular components of cancers used for diagnosis and treatment. Deconstruct the unique diseases that affect women throughout the life cycle and social factors that influence them.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 970 – GENOMICS, PROTEOMICS, AND METABOLOMICS: A DEEP DIVE INTO OMICS DATA ANALYSIS**

2 credits.

Advances in medicine are increasingly being driven by "big data" analyses, including proteomics, genomics, and metabolomics. Basic knowledge of how to analyze these datasets can allow one to generate and test hypotheses that have the potential to transform a field. In this course, students will conduct individual data mining expeditions using a collection of large proteomics and metabolomics data sets. Formulate hypotheses about the interrelationships of molecules and their potential relationship to health, disease, and biological phenotypes. Basic background instruction on "omics" methodologies, heritability studies, and analytical methods will be provided. Provides the basic knowledge to carry out future 'omics analyses; using scientific inquiry to potentially transform the practice of medicine.

**Requisites:** MED SC-M 810, 811, 812 and 813; or Declared in Cellular and Molecular Pathology Graduate Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PATH 990 – RESEARCH**

1-8 credits.

For Grad and medical students desiring advanced pathology; work done under the direction of a senior staff member.

**Requisites:** Declared in Medicine program or Cellular and Molecular Pathology graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



## PEDIATRICS (PEDIAT)

### PEDIAT 699 – INDEPENDENT STUDY

0-5 credits.

Independent study projects as arranged with faculty or instructional staff.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### PEDIAT/MED PHYS 705 – WOMEN AND LEADERSHIP: SCIENCE, HEALTH AND ENGINEERING

2 credits.

Multiple professional and scientific groups have identified the underrepresentation and lack of advancement of women in academia as a national workforce problem. Review evolving perspectives of leadership and how unconscious assumptions about the behaviors and traits of men, women, and leaders impede women's advancement. Emphasizes the implications for women in the fields of science, health and engineering and explore the potential impact on the advancement of knowledge and improvements in health. Provides the opportunity to apply evidence-based perspectives using experiential methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PEDIAT 909 – PEDIATRICS INTERNSHIP PREP COURSE (PIPC)

1 credit.

Use both didactics and simulations to cover high yield topics that a new Pediatric Intern should know to start a Pediatrics Residency. Working with a team of faculty, multi-disciplinary staff, residents, fellows and course directors, review topics such as intravenous fluid management, nutrition, vaccines, newborn care, fever and antibiotic therapy, developmental skills, hematology/oncology emergencies, dermatology, respiratory distress, endocrine emergencies, radiology, and informed consent. Participate in simulations to review medical knowledge, communication skills, and teamwork. Participate in difficult communication cases including obtaining informed consent or talking with parents of patients who choose to decline recommended management options. Practice common pediatric skills including IV placement, umbilical line placement, defibrillation, airway management, lumbar puncture, and suturing.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PEDIAT 910 – INDEPENDENT READING AND RESEARCH IN PEDIATRICS

1-8 credits.

Independent research under the direct supervision of department of pediatrics faculty. Each student's research project is individualized to meet student research goals within context of faculty research needs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### PEDIAT 919 – INDIVIDUALIZED CLINICAL ELECTIVE IN PEDIATRICS

1-4 credits.

Supervised activities include interacting with patients primarily in outpatient setting, participating in all clinical activities and other components of the individualized rotation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### PEDIAT 930 – PEDIATRIC NEONATOLOGY ELECTIVE

2-4 credits.

Activities include attending deliveries of high-risk infants, admitting and managing a circumscribed select group of patients under the supervision of the attending neonatologist. Daily notes and orders are written and counter-signed by the neonatologist. Weekly rounds are made with social worker/discharge planner. Night call will be taken every fourth night. Attend appropriate perinatal conferences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### PEDIAT 935 – SURGICAL, NEUROLOGIC, & COMPLEX CARE OF THE NEONATE ELECTIVE

2-4 credits.

Supervised activities include inpatient management in an intensive care setting and attending all the neonatal division educational sessions, which may include; Neonatology journal club, Multidisciplinary discharge planning rounds, and Individual patient care conferences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**PEDIAT 938 – INPATIENT ACTING INTERNSHIP-PEDIATRICS**

4 credits.

Pediatric acting interns will serve as the primary provider for pediatric patients in one of the offered inpatient settings. This includes responsibility for diagnosis and management; communication with patients, families, and other interdisciplinary care providers; and self-directed learning and application of evidence-based medicine. The student will work under the direct supervision of a senior resident, fellows and the pediatric faculty. This rotation will provide the student with the opportunity to function at the intern level and play an active role in inpatient management of inpatient pediatric patients.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PEDIAT 940 – ADOLESCENT MEDICINE ELECTIVE**

2-4 credits.

Supervised activities include interacting with patients in adolescent outpatient clinics, performing histories, physical examinations and managing patients with supervision by our staff. Give a didactic presentation at the end of the rotation on a topic of student's choice as well as write a blog for Writes of Passage. Customize clinic schedule from a menu of opportunities provided by the director.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PEDIAT 941 – PEDIATRIC ALLERGY/IMMUNOLOGY ELECTIVE**

2-4 credits.

Supervised activities include seeing patients in outpatient clinics, observing procedures and attending weekly pediatric allergy conferences. Hands-on clerkship experience in this sub-specialty involves both very common and uncommon diseases in pediatrics in allergy and immunology. Specific topics that are covered include food allergy, asthma, allergic rhinitis, atopic dermatitis, and primary immune deficiency. As these diseases are increasing in prevalence and have broad impacts on child health, this experience is ideal preparation for careers in pediatric and medical specialties, or surgical specialties.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PEDIAT 942 – PEDIATRIC COMPLEX CARE ELECTIVE**

2-4 credits.

Under direct supervision by faculty, participate in medical co-management and care coordination for children with medical complexity. Multifaceted approach to learning about children with medical complexity, with focus on history and exam skills during scheduled maintenance and acute care visits. Pediatric ethics, organizing and maintaining accurate and up-to-date electronic medical records, documentation skills.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PEDIAT 943 – PEDIATRIC CARDIOLOGY ELECTIVE**

2-4 credits.

Supervised by house staff and attending physicians activities include attending a variety of outpatient clinics with pediatric cardiologists, inpatient pediatric cardiology rounds and consults with the inpatient service team, observing various scheduled procedures (including echocardiography, ECG, cardiac catheterization, electrophysiology study), attending pediatric cardiology related conferences, presenting cases and teaching topics, and discussing patient cases.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PEDIAT 950 – PEDIATRIC ENDOCRINOLOGY AND DIABETES ELECTIVE**

2-4 credits.

Supervised activities include interacting with patients primarily in outpatient (some inpatient) settings, performing histories and physical examinations and managing patients with supervision by our staff. Group and individual discussions concerning patients seen in both the outpatient and inpatient settings will occur.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PEDIAT 953 – CLINICAL GENETICS ELECTIVE**

2-4 credits.

Supervised activities include interacting with patients primarily in outpatient setting, participating in all clinics, rounds, consults and other components of the service. Active participation in patient evaluations and patient management is another component of this rotation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021

**PEDIAT 956 – PEDIATRIC HEMATOLOGY-ONCOLOGY ELECTIVE**

2-4 credits.

Supervised activities include attending pediatric hematology/oncology clinics, evaluating patients in the clinics and attending the weekly pediatric hematology/oncology conferences.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PEDIAT 963 – PEDIATRIC NEPHROLOGY**

2-4 credits.

Provides an in-depth introduction to a variety of kidney diseases, allowing students to build upon their ability to diagnose and treat complex pediatric and adolescent patients. Students will rotate through the American Family Children's Hospital inpatient nephrology service, outpatient nephrology clinic, and the inpatient dialysis unit. Two and four week rotations are available.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PEDIAT 966 – PRIMARY CARE SPORTS MEDICINE ELECTIVE**

2-4 credits.

Supervised activities include interacting with patients and Licensed Athletic Trainers, residents and primary care sports medicine fellow in various outpatient settings and participating in assigned sports medicine clinics. Participating in patient evaluations, patient management and attending the weekly Friday morning sports medicine conference are additional components of this rotation. Other opportunities may include observing or evaluating patients in other clinical situations including the McClain Center UW athlete clinics, high school game coverage, PT clinics, other orthopedic clinics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PEDIAT 967 – PEDIATRIC PULMONOLOGY ELECTIVE**

2-4 credits.

Supervised activities include: attending outpatient clinics, rounding with inpatient attendings, attending weekly didactic and clinical conferences, observation of flexible bronchoscopies and participating in one-on-one tutorials.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PEDIAT 968 – COMMUNITY PEDIATRICS & ADVOCACY EXPERIENCE**

2-4 credits.

Medical students will learn about the aspects of the health care of children which lie outside of the traditional hospital/clinic systems. Gaining a strong appreciation of the social determinants of health, public health measures, and systems-based approaches is a key aspect of this elective. An advocacy project will be formulated and completed as part of this rotation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PEDIAT 970 – PEDIATRIC RHEUMATOLOGY ELECTIVE**

2-4 credits.

Supervised activities include seeing patients in outpatient clinics, rounding with inpatient attendings, attending weekly pediatric rheumatology conferences, observing procedures and attending one-to-one tutorials.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PEDIAT 971 – PEDIATRIC INFECTIOUS DISEASES**

2-4 credits.

Students will round as members of the inpatient Pediatric Infectious Disease consult team. They will perform infectious disease focused history and physical examinations and participate in the development and communication of management recommendations. Students will also attend outpatient infectious disease clinics, case conferences, microbiology rounds and daily pediatric conferences including morning report, problem conference and grand rounds.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PEDIAT 973 – PEDIATRIC GASTROENTEROLOGY**

2-4 credits.

Students will participate in pediatric gastroenterology outpatient clinics, round with inpatient faculty, attend pediatric gastroenterology conferences, attend daily pediatric conferences including morning report, case conferences, and grand rounds. Students will also be able to observe procedures in the operating room. Students will be responsible for a 20 minute case-based presentation at the end of the rotation.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PEDIAT 975 – DEVELOPMENTAL PEDIATRICS**

2-4 credits.

An introduction to developmental pediatrics and the care of children with developmental disabilities. Students will rotate through a variety of clinics which will be tailored based on interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PEDIAT 990 – RESEARCH**

1-12 credits.

Research and/or scholarly work (e.g. quality improvement, clinical case reports) supervised by faculty and/or staff member within the Department of Pediatrics with appropriate content expertise. A supervisor and project must be identified prior to requesting enrollment in this course.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## PHARMACEUTICAL SCIENCES (PHM SCI)

**PHM SCI 310 – DRUGS AND THEIR ACTIONS**

2 credits.

Introduces students to the biological effects of drugs on human health. Emphasis on how drugs, especially those used in diseases of major human health significance, act in the body. Drugs that are abused also will be covered. This course is not intended for medical, nursing, pharmacy, and physician assistant students.

**Requisites:** Not open to students declared in the Nursing, Physician Assistant, or Doctor of Pharmacy programs

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 420 – PHYSICOCHEMICAL PRINCIPLES OF DRUG FORMULATION AND DELIVERY**

3 credits.

Applications of physicochemical principles to pharmaceutical systems.

**Requisites:** Declared in Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI/B M E 430 – BIOLOGICAL INTERACTIONS WITH MATERIALS**

3 credits.

Addresses the range of materials currently being utilized for various biomedical applications, the biological systems governing biomaterial applications, analytical techniques pertinent to biomaterial evaluation, and selected major medical applications in which biomaterials play an important role.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 383) and (CHEM 341 or 343)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 432 – PHARMACEUTICAL BIOCHEMISTRY**

4 credits.

Chemistry of metabolic processes and products of living matter with emphasis on pharmaceutical and medicinal aspects as well as recombinant DNA technology. Laboratory experience with the chemistry of metabolic processes, products of living matter and recombinant DNA.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI 490 – SELECTED TOPICS IN PHARMACEUTICAL SCIENCES**

1-4 credits.

Specialized subject matter of current interest to undergraduate and professional students.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM SCI 493 – SELECTED TOPICS IN PHARMACEUTICAL SCIENCES**

1-4 credits.

Specialized subject matter of current interest to graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHM SCI/PHM COL-M 521 – PHARMACOLOGY I**

3 credits.

Pharmacological actions of important drugs, including drugs that affect the peripheral nervous system, the central nervous system, and the gastrointestinal tract.

**Requisites:** Junior standing and Pharmacology and Toxicology undergraduate program or declared in the Doctor of Pharmacy program with second year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI/PHMCOL-M 522 – PHARMACOLOGY II**

3–4 credits.

Pharmacological actions of important drugs, including hematopoietic, thrombolytic, antihyperlipidemic, immunopharmacologic, anticancer, anti-inflammatory, diuretic, antihypertensive, antianginal, and anti-arrhythmic agents, and agents used to treat congestive heart failure.

**Requisites:** PHMCOL-M/PHM SCI/PHMCOL-M 521**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM SCI 531 – MEDICINAL CHEMISTRY I**

3 credits.

Basic concepts in the chemistry of small molecule medicinal products. Structure activity of cholinergic, adrenergic, serotonergic and dopaminergic agents, antidepressant, anti-anxiety drugs, opioids, and antihistamines. Overview of drug metabolism and the clinical effects of metabolic drug interactions and genetic variability in drug metabolism genes.

**Requisites:** PHM SCI 432**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM SCI 532 – MEDICINAL CHEMISTRY II**

2 credits.

Chemistry of medicinal products, including antihyperlipidemics, glucocorticoids, estrogens, progestins, nonsteroidal anti-inflammatories, antitumor agents, and enzyme inhibitors.

**Requisites:** PHM SCI 531**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM SCI 540 – DRUG DELIVERY SYSTEMS FOR PHARMACOTHERAPY**

3 credits.

A series of lectures by experts covering: i) introductory drug development and delivery system development processes; ii) various drug delivery routes (oral, topical, rectal, vaginal, urethral, nasal, and pulmonary); iii) various delivery systems (conventional, ophthalmic, CNS, and recent advances); iv) delivery systems related to biofilms, infection, and vaccines.

**Requisites:** Declared in the Doctor of Pharmacy program with second year standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM SCI 541 – PHARMACEUTICAL CALCULATIONS, DISPENSING AND COMPOUNDING**

3 credits.

Introductory laboratory course in compounding and dispensing of pharmaceutical dosage forms, including sterile products. Includes practice in interpretation of prescription orders, pharmaceutical calculations, compounding procedures, physical manipulation of drugs and dosage form components, and product packaging and labeling.

**Requisites:** PHM SCI 420**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM SCI 542 – PARENTERAL THERAPY AND NUTRITION**

3 credits.

An introduction to parenteral therapy and nutrition focusing on the fundamental properties, calculations involved and the methods to prepare safe and reliable injectable medications for patients.

**Requisites:** PHM SCI 541 and concurrent registration in PHM SCI 540**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM SCI 558 – LABORATORY TECHNIQUES IN PHARMACOLOGY AND TOXICOLOGY**

2 credits.

Basic laboratory techniques employed in pharmacological and toxicological research.

**Requisites:** Declared in the Pharmacology and Toxicology undergraduate program**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM SCI 581 – MOLECULAR AND CELLULAR PRINCIPLES IN PHARMACOLOGY**

4 credits.

Provides an in-depth introduction to the molecular and cellular principles of pharmacology. Emphasis is on the mechanisms of drug and small molecule action in cells, with a particular focus on downstream signaling pathways, second messenger systems, protein kinase cascades, and the regulation of gene transcription.

**Requisites:** PHMCOL-M/PHM SCI/PHMCOL-M 521**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM SCI 623 – PHARMACOLOGY III**

3 credits.

Pharmacological actions and underlying basic and clinical science of antimicrobial and antiviral drugs. Pharmacology of hormones and other drugs affecting the endocrine system.

**Requisites:** PHMCOL-M/PHM SCI/PHMCOL-M 522**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM SCI/M&ENVTOX/ONCOLOGY/PHMCOL-M/POP HLTH 625 – TOXICOLOGY I**

3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

**Requisites:** (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or (BIOCORE 485 486)) and PATH 404; or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PHM SCI/M&ENVTOX/PATH/PHMCOL-M/POP HLTH 626 – TOXICOLOGY II**

3 credits.

Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

**Requisites:** MENVTOX/ONCOLOGY/PHMCOL-M/PHM SCI/POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHMCOL-M 625

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 679 – PHARMACOLOGY AND TOXICOLOGY SEMINAR**

1 credit.

Senior student presentations of independent research or of published papers on a specific topic approved by the course coordinator. Faculty-led seminars on selected topics regarding responsible conduct of research. The course also provides a venue for career talks by Pharmacology and Toxicology alumni and guests working in a variety of professional settings – research, industry (pharmaceutical; biotech; contract research; consumer products; etc.), a variety of healthcare professions, and law.

**Requisites:** Declared in the Pharmacology and Toxicology undergraduate program

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**PHM SCI 691 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Fall 2010

**PHM SCI 692 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**Last Taught:** Spring 2011

**PHM SCI 699 – ADVANCED INDEPENDENT STUDY**

0-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM SCI 750 – THE DRUG DEVELOPMENT PROCESS**

3 credits.

Overview of the drug development process from target identification, development, preclinical studies, clinical trials to post approval monitoring. Small and Large molecules (biologics) will be covered along with a basic coverage of regulatory authorities. Brief history of drug development as well as case studies that offer insights into the development and approval process. Comprehensive overview of the process of drug development, some of the decision-making logic, the vocabulary, and the ability to communicate within the industry.

**Requisites:** Declared in MS Pharmaceutical Sciences or Capstone Certificate in Applied Drug Development

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI 751 – INTRODUCTION TO REGULATORY PRACTICE**

3 credits.

Identifies and examines the key regulatory agencies and practices that govern the highly regulated and diverse pharmaceutical industry. Highlights current and emerging FDA and ICH regulations and guidance documents to successfully navigate meeting with the agencies and to submit required documentation for successful product development.

**Requisites:** Declared in MS Pharmaceutical Sciences or Capstone Certificate in Applied Drug Development

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 752 – GXP (GOOD PRACTICE): WORKING IN A REGULATED ENVIRONMENT**

3 credits.

The pharmaceutical and biopharmaceutical industries have strict documentation and production requirements. Prepares the learner to work in a regulated environment. Explains roles and responsibilities across multiple disciplines and proper documentation practices. Prepares learner for protocol, report creation and audit responses. Discusses specifications, guidances and root-cause analysis.

**Requisites:** Declared in MS Pharmaceutical Sciences or Capstone Certificate in Applied Drug Development

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 753 – PHARMACEUTICAL ECONOMICS AND PROJECT MANAGEMENT**

3 credits.

Provides an introduction to key terminology and lays a foundation of the critical body of knowledge project team members must master in a contemporary drug development enterprise. The latest project management theory is integrated with practical techniques and tools so that course participants learn to properly manage and schedule quality, budget, and progress objectives. Provides an overview of the economic structures, management and policy issues that drive and challenge the pharmaceutical and biotechnology industries.

**Requisites:** Declared in MS Pharmaceutical Sciences or Capstone Certificate in Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 754 – LIFECYCLE MANAGEMENT OF PHARMACEUTICAL PRODUCTS**

3 credits.

Explores the process of bringing pharmaceutical products to market, particularly as it applies to the scaling up, manufacturing, and maintenance phases that come after FDA approval of a product is obtained. Identifies various factors that impact the life cycle management of pharmaceutical products from development to sustained large-scale distribution, such as: target product profile (TPP), chemistry, manufacturing and controls (CMC), active pharmaceutical ingredient (API) supply chain considerations, raw materials shortages, demand planning/forecasting, and post-approval regulatory considerations.

**Requisites:** Declared in MS Pharmaceutical Sciences: Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 755 – LABORATORY AND INSTRUMENTATION METHODS**

3 credits.

Teaches the theory and application of many common laboratory techniques and instruments used in drug discovery and development. Includes a laboratory component to teach safety and basic techniques necessary for working in a lab. Instruction begins with basic techniques and builds upon these techniques to instruct in proper sample preparation and handling for analysis using a variety of analytical instrumentation.

**Requisites:** Declared in the MS Pharmaceutical Sciences: Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 756 – INTRODUCTION TO DATA ANALYSES IN DRUG DEVELOPMENT**

3 credits.

Provides a high-level overview of how data analysis techniques augment the drug discovery and development process. Focuses on project-based skills-building through the application of industry-standard software and use of public databases. Explores best practices for data processing and management to ensure experimental reproducibility. Develops troubleshooting skills through critical evaluation of data analysis results and root cause analysis.

**Requisites:** Declared in MS Pharmaceutical Sciences: Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 757 – SURVEY OF THE NEUROACTIVE DRUG DEVELOPMENT PROCESS**

2 credits.

Survey of the drug development process from target identification, development, preclinical studies, clinical trials to post-approval monitoring, particularly as applicable to neuroactive drugs. Differences between small and large molecules (biologics) will be covered, along with a basic coverage of regulatory authorities. A brief history of drug development will be provided, along with coverage of special topics related to stages of the drug development process. Broad survey-style overview of the phases in the drug development process, regulatory considerations, relevant vocabulary, and the ability to communicate within the industry.

**Requisites:** Declared in MS Pharmaceutical Sciences: Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PHM SCI 759 – CURRENT TRENDS IN DRUG DISCOVERY AND DEVELOPMENT**

1 credit.

Provides the experience and skill to find, read and critically analyze scientific and regulatory literature in the field of drug discovery and development.

**Requisites:** Declared in MS Pharmaceutical Sciences or Capstone Certificate in Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 760 – SUMMATIVE RESEARCH INTERNSHIP**

3-4 credits.

Summation of core coursework to a real-world project and/or internship experience. Synthesis of knowledge, skills and abilities to demonstrate aptitude for careers in respective industries.

**Requisites:** Declared in MS Pharmaceutical Sciences

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**PHM SCI 761 – INTRODUCTION TO PHARMACOLOGY**

1 credit.

Introduction to basic concepts of drug delivery and action, methods used to study drug action. Includes a brief survey of drugs acting on the cardiovascular system, the central nervous system and other drug targets.

**Requisites:** Declared in MS Pharmaceutical Sciences: Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 762 – THE DRUG DEVELOPMENT PROCESS I**

3 credits.

Overview of the drug development process from discovery to approval. Process of drug development from target identification to investigational new drug (IND) submission including tenets of rational drug design, preclinical CMC activities, and preclinical pharmacology, pharmacokinetic, and toxicology studies. Small and large molecules (biologics/biotherapeutics) will be covered. Brief history of drug development and various case studies offering insights into preclinical drug development.

**Requisites:** Declared in Pharmaceutical Sciences: Applied Drug Development MS or Capstone Certificate in Applied Drug Development

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PHM SCI/CHEM 766 – MOLECULAR RECOGNITION**

2-3 credits.

Origin, nature, classification, and description of intermolecular forces. The hydrophobic effect. Molecular complexes, binding constants, and their measurements. General principles of self-assembly, molecular recognition, complex formation, host design. Supramolecular systems and their dynamics. Micelles, bilayers, vesicles, biological membranes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI 768 – PHARMACOKINETICS**

3 credits.

Quantitative aspects of drug absorption, distribution, metabolism, and excretion. Philosophy and applications of pharmacokinetic modeling and its use in clinical practice.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI 773 – MOLECULAR SOLIDS**

2 credits.

Describes the structures, properties, formation, and transformation of molecular solids, with emphasis on pharmaceutical solids. In each area, relevant theory, experiments, and case studies are presented.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PHM SCI 775 – POLYMERIC DRUG DELIVERY**

3 credits.

Introduces synthetic and biological polymers applied for drug targeting and controlled drug release, focusing on injectable drugs, including biologics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 780 – PRINCIPLES OF PHARMACEUTICAL SCIENCES**

3 credits.

Introductory-level graduate course providing overview of the drug development process, involving drug discovery, drug action, and drug delivery. Exposes students to cutting-edge research and the chemistry, biology, physical chemistry, and engineering that underpin pharmaceutical sciences research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM SCI 786 – NATURAL PRODUCT SYNTHESIS, BIOSYNTHESIS AND DRUG DISCOVERY**

3 credits.

Synthesis and biosynthesis of natural products in drug discovery. Topics include: natural products in drug discovery; biosynthetic pathways and synthetic strategies for major natural product classes; and basic bioorganic chemistry and enzyme mechanisms in biosynthesis.

**Requisites:** CHEM 345 and BIOCHEM 508

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM SCI 931 – PHARMACEUTICAL SCIENCES SEMINAR**

1 credit.

Weekly series that provides exposure to a diverse array of research topics. Students enroll in one of three sections, corresponding to their research core (Drug Action, Drug Discovery, or Drug Delivery). Students in their 2nd year and beyond present their research progress or review literature. The course includes talks from nationally and internationally recognized scientists from academia and industry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PHM SCI 932 – PHARMACEUTICAL SCIENCES SEMINAR**

1 credit.

Weekly series that provides exposure to a diverse array of research topics. Students enroll in one of three sections, corresponding to their research core (Drug Action, Drug Discovery, or Drug Delivery). Students in their 2nd-year and beyond present their research progress or review literature. The course includes talks from nationally and internationally recognized scientists from academia and industry.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHM SCI 990 – RESEARCH**

1-12 credits.

Independent research and writing for graduate and students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHM SCI 999 – ADVANCED INDEPENDENT STUDY**

1-12 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PHARMACOLOGY (PHMCOL-M)****PHMCOL-M/PHM SCI 521 – PHARMACOLOGY I**

3 credits.

Pharmacological actions of important drugs, including drugs that affect the peripheral nervous system, the central nervous system, and the gastrointestinal tract.

**Requisites:** Junior standing and Pharmacology and Toxicology undergraduate program or declared in the Doctor of Pharmacy program with second year standing**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHMCOL-M/PHM SCI 522 – PHARMACOLOGY II**

3-4 credits.

Pharmacological actions of important drugs, including hematopoietic, thrombolytic, antihyperlipidemic, immunopharmacologic, anticancer, anti-inflammatory, diuretic, antihypertensive, antianginal, and anti-arrhythmic agents, and agents used to treat congestive heart failure.

**Requisites:** PHMCOL-M/PHM SCI/PHMCOL-M 521**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHMCOL-M/B M E/MED PHYS/PHYSICS/RADIOL 619 – MICROSCOPY OF LIFE**

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

**Requisites:** PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHMCOL-M/M&ENVTOX/ONCOLOGY/PHM SCI/POP HLTH 625 – TOXICOLOGY I**

3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

**Requisites:** (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or (BIOCORE 485 486)) and PATH 404; or graduate/professional standing**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PHMCOL-M/M&ENVTOX/PATH/PHM SCI/POP HLTH 626 – TOXICOLOGY II**

3 credits.

Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

**Requisites:** MENVTOX/ONCOLOGY/PHMCOL-M/PHM SCI/POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHMCOL-M 625

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHMCOL-M/BIOCHEM/ZOOLOGY 630 – CELLULAR SIGNAL TRANSDUCTION MECHANISMS**

3 credits.

Comprehensive coverage of human hormones, growth factors and other mediators; emphasis on hormone action and biosynthesis, cell biology of hormone-producing cells.

**Requisites:** (BIOCHEM 501 or 507) and (BIOCORE 383, BIOLOGY/ZOOLOGY/BIOLOGY 101, or ZOOLOGY 570) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHMCOL-M 699 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects for juniors and seniors.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHMCOL-M 715 – GRANT WRITING**

1 credit.

Develop a predoctoral fellowship application based on the student's proposed thesis project. Receive input on ideas and writing, both from the instructor and peers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHMCOL-M 739 – RIGOR, REPRODUCIBILITY AND BECOMING AN EFFECTIVE RESEARCHER**

1 credit.

Focuses on two of the cornerstones of science advancement, which are rigor in designing and performing scientific research and the ability to reproduce biomedical research findings. Emphasizes the application of rigor that ensures robust and unbiased experimental design, methodology, analysis, interpretation, and reporting of results. Highlights topics of particular importance to first year graduate students, including the development of effective presentation skills, communication in a professional setting, and a strong mentor-mentee relationship.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHMCOL-M 781 – MOLECULAR AND CELLULAR PRINCIPLES IN PHARMACOLOGY**

4 credits.

Provides an in-depth introduction to the molecular and cellular principles of pharmacology. Emphasis is on the mechanisms of drug and small molecule action in cells, with a particular focus on downstream signaling pathways, second messenger systems, protein kinase cascades, and the regulation of gene transcription.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHMCOL-M 875 – SPECIAL TOPICS IN PHARMACOLOGY**

1-3 credits.

Special topics in pharmacology. Topics may vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**PHMCOL-M 901 – SEMINAR AND JOURNAL CLUB**

1-2 credits.

Students and staff present research reports of current interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHMCOL-M 990 – RESEARCH**

1-12 credits.

Research facilities of the department available to qualified students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## PHARMACY (PHARMACY)

### PHARMACY 125 – EXPLORING PHARMACY I

2 credits.

Provides opportunities to integrate and apply introductory concepts and content related to Pharmaceutical Sciences, Social Administrative Pharmacy, and Pharmacy Practice. Students also develop academic and interpersonal skills helpful for success in current and future courses.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 126 – EXPLORING PHARMACY II

1 credit.

Expands upon the learning foundations provided in PHARMACY 125. Additional opportunities to develop pre-professional plans, explore unique pharmacy career opportunities and learn about pharmacy student co-curricular and professional development experiences. Prepare students to successfully participate in the pharmacy admissions process.

**Requisites:** PHARMACY 125

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PHARMACY 225 – PHARMACY EXPLORATION SEMINAR

2 credits.

Provides opportunities to explore pharmacy career paths, develop pre-professional plans, learn about pharmacy student co-curricular and professional development experiences, and prepare to successfully participate in the pharmacy admissions process.

**Requisites:** Not open to students with credit for PHARMACY 125 or 126

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PHARMACY 423 – PHARMACY INTEGRATED LEARNING LABORATORY

1 credit.

Provides an interdivisional foundation for pharmacy students to understand many aspects of pharmacy through a wide variety of activities. Delivers a broad understanding of the pharmacist's public health and patient advocacy role with opportunities to practice basic calculations related to drug formulations in the context of safety, drug stability, and patient care. Fosters development of communication skills with peers and patients and be introduced to patient counseling principles. Includes active participation in a longitudinal group experience with an assigned senior in the community to apply course content.

**Requisites:** Declared in the Doctor of Pharmacy Program with first year standing only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 434 – PHARMACEUTICAL GENETICS AND IMMUNOLOGY

2 credits.

Facilitates the understanding and application of the principles of pharmaceutical genetics, immunology, and biotechnology.

**Requisites:** Declared in Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PHARMACY 451 – MARGINALIZED POPULATIONS IN HEALTHCARE AND MEDIA

1 credit.

Provides opportunities for learning about healthcare barriers and facilitators: health disparities; and health outcomes using popular culture movies, and media that portray marginalized communities. Provides opportunities to discuss how their identities influence their view of the movie's theme and how bias may impact care provided in a healthcare setting.

**Requisites:** Declared in the Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 490 – SELECTED TOPICS IN PHARMACY

1-2 credits.

Various topics related to the Pharmacy profession.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### PHARMACY 563 – DRUG HISTORY: DANGEROUS DRUGS AND MAGIC BULLETS

2 credits.

A history of medicinal substances and dangerous drugs in wider context, with a focus on gender, race, class, business, and other analytical categories. "Medicines" and "drugs" change over time -- and concepts of risk, danger, legality, and even scientific evidence are elastic. Histories of laws, regulations, and key historical actors, as well as specific drug biographies, will be provided.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 564 – PSYCHEDELIC HISTORY: SACRED PLANTS, SCIENCE & PSYCHOTHERAPY

3 credits.

A history of psychedelics in the U.S. and more globally. Read texts that were formative in the development of the history of psychopharmacology, pharmaceuticals, and the "war on drugs." Examine readings that represent different themes, subfields, or areas of research interest within the history of psychedelics (medicine science). Beyond biomedicine, types of analysis include: consumerism, class, ethnicity, gender, and military history. Histories of laws, regulations, and key historical actors, as well as specific drug biographies, will be provided.

**Requisites:** Declared in MS Pharmaceutical Sciences: Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PHARMACY/ISY E 608 – SAFETY AND QUALITY IN THE MEDICATION USE SYSTEM

3 credits.

Addresses the problems of medication errors and quality in health care, problem resolutions, methods of assessment, and intervention implementation and quality management.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 612 – LEGAL STRUCTURES FOR CONTROLLED SUBSTANCES

1 credit.

Discusses federal statutes and regulations related to drug manufacturing, drug distribution, and drug use, with an emphasis on drug scheduling and controlled substances. Describes the governmental framework within which pharmaceutical development is regulated and practiced. Covers statutes and regulations protecting human subjects' privacy and autonomy in research.

**Requisites:** Declared in MS Pharmaceutical Sciences: Psychoactive Pharmaceutical Investigation or Capstone Certificate in Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 621 – PHARMACOKINETICS

3 credits.

Introduction to pharmacokinetics. Fundamental principles and specific physical models are discussed. Absorption, distribution, metabolism, and excretion are thoroughly described including applications to pharmacotherapy mostly through a one body compartment model. Biopharmaceuticals and small molecule drugs are discussed based on their specific pharmacokinetics. All pharmacokinetics and pharmacodynamics principles and concepts are further described in depth in terms of their clinical applications with an emphasis on the role of the pharmacy professional.

**Requisites:** Declared in the Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PHARMACY 630 – RURAL PHARMACY PRACTICE

2 credits.

Explore how public health intersects with healthcare delivery in rural settings through direct engagement with rural communities, practitioners, and themes in rural practice. Apply therapeutic knowledge to fulfill unmet community needs, and thereby enhance delivery of healthcare in rural communities. Create a pharmacy-driven service with the goal of enhancing healthcare delivery in a rural area based on a community assessment, exploration of contemporary rural health care trends, and discussion with current rural health practitioners.

**Requisites:** Declared in the Doctor of Pharmacy Program with third year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PHARMACY 640 – APPROPRIATE USE OF ABUSED DRUGS

2 credits.

Discusses the biological and pharmacological basis of dependence of substances of abuse. Teaches the skills required for best practices in prescribing agents of abuse. Drugs of abuse covered include opioids use for acute and chronic pain, in addition to other abused substances such as cannabinoids, psychedelics, amphetamines and related agents. Students will learn appropriate methods of therapeutic tapering and treatment of withdrawal, as well as the treatment of known and unknown agent overdose. Teaches skills in interpreting and responding to findings of urine drug tests and the prescription drug monitoring database.

**Requisites:** PHM COL-M/PHM SCI/PHM COL-M 521

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHARMACY 645 – PHARMACEUTICAL BIOTECHNOLOGY AND PHARMACOGENOMICS**

2-3 credits.

Facilitates the understanding and application of the principles of pharmaceutical biotechnology and pharmacogenomics. The third, optional, elective credit, open only to Pharm.D. students, will consist of clinical case studies in biotechnology and pharmacogenomics, to apply theory to clinical pharmacy practice.

**Requisites:** PHM SCI 432 and Declared in the Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHARMACY 658 – SPECIALTY PHARMACY IN A MODERN HEALTHCARE SETTING**

2 credits.

Introduction to specialty pharmacy, a growing and important segment of the pharmaceutical marketplace. Importance of economic, business and management principles to develop, implement and evaluate specialty pharmacy services within health systems. Modern health system cases about implementation of specialty pharmacy services in clinic and in pharmacy departments to improve patient outcomes from specialty medications and increase volume of specialty medications dispensed.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PHARMACY 671 – PSYCHEDELIC DRUGS IN SCIENCE AND SOCIETY**

2 credits.

Overview of the science behind therapeutic use of psychedelic drugs such as psilocybin and LSD; basic medicinal chemistry of the tryptamine and phenethylamine psychedelics, as well as the neurochemistry and neuropharmacology of their action. Fundamentals of drug development and FDA approval process; Standards of screening and guiding individuals before and during a therapeutic psychedelic session contrasted with the recreational use of these drugs; Appraisal of current clinical research including an objective analysis of risk/benefit for indications such as depression and addiction. History of traditional, ceremonial use of psychedelics, as well as the relationship between recreational use and attempts to regulate and restrict their use. Role of psychedelics in indigenous cultures, impacts of psychedelic tourism and wild-crafting of plants and animals on indigenous peoples. Contrasts in psychedelic treatments to other therapeutic interventions such as mindfulness and meditation.

**Requisites:** Declared in MS Pharmaceutical Sciences: Psychoactive Pharmaceutical Investigation or Capstone Certificate in Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHARMACY 674 – CANNABINOIDS IN SCIENCE AND SOCIETY**

2 credits.

Provides an overview of the history, botany, and legal policies of cannabis and examines cannabinoid pharmacology and the most common therapeutic applications. Assessment of cannabinoid therapy with an emphasis on evaluating the risks and benefits of cannabinoid therapy for these conditions, product and dose regimen selection, monitoring and titration.

**Requisites:** Graduate/professional standing or declared in Psychoactive Pharmaceutical Investigation Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHARMACY/NURSING/PHY ASST/PHY THER/PUBLHLTH 758 – INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP**

1 credit.

Build skills in collaboration, problem solving, and reflection to approach complex community-based public health problems contribute to becoming a public leader. Explore the six levels of public health leadership through the practices of current and past public health leaders, case studies, and personal experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PHARMACY 770 – CNS DRUG DESIGNS, ACTIONS, AND APPLICATIONS I**

2 credits.

Provides a foundational understanding of how chemical features can influence the biological activity of a molecule on molecular targets within the central nervous system (CNS), how alteration of signaling through these targets occurs and leads to physiologically relevant changes, and how major classes of pharmaceuticals acting on the central nervous system are applied in healthcare settings to improve patient outcomes. Integration between concepts arising at the chemical, molecular, cellular, systems, organism, and societal levels will be explored.

**Requisites:** Declared in MS Pharmaceutical Sciences

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



## PHARMACY 771 – CNS DRUG DESIGNS, ACTIONS, AND APPLICATIONS II

2 credits.

Gain additional understanding of how chemical features can influence the biological activity of a molecule on molecular targets within the central nervous system, how alteration of signaling through these targets occurs and leads to physiologically relevant changes, and how major classes of pharmaceuticals acting on the central nervous system are applied in healthcare settings to improve patient outcomes. Integration between concepts arising at the chemical, molecular, cellular, systems, organism, and societal levels will be explored.

**Requisites:** PHARMACY 770

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PHARMACY 800 – RESEARCH ETHICS: SCIENTIFIC INTEGRITY AND THE RESPONSIBLE CONDUCT OF RESEARCH

2 credits.

Familiarizes graduate students with basic ethical issues associated with biomedical science research, taught via a case study approach. Content structured to meet NIH and NSF requirements for Responsible Conduct of Research (RCR) training. Students declared in the Pharmacology and Toxicology undergraduate program may enroll via consent of instructor.

**Requisites:** Declared in the Pharmaceutical Sciences PhD, Social and Administrative Sciences in Pharmacy PhD, or in the Pharmacy Master's program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PHARMACY 801 – BIOETHICS AND SCIENTIFIC INTEGRITY

2 credits.

Explores basic ethical issues associated with biomedical science research, particularly as pertains to the development of drugs and emergent pharmaceutical therapies, such as psychoactive-assisted therapies.

**Requisites:** Declared in MS Pharmaceutical Sciences: Psychoactive Pharmaceutical Investigation or Capstone Certificate in Psychoactive Pharmaceutical Investigation

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

# PHARMACY PRACTICE (PHM PRAC)

## PHM PRAC 305 – CONSUMER SELF-CARE AND OVER-THE-COUNTER DRUGS

2 credits.

Provides learners with information regarding self-care of common, minor health conditions. Emphasis on: illness prevention, health condition symptoms, guidelines for over-the-counter product use, adverse effects and alcohol/drug interactions of over-the-counter products, when to request professional care.

**Requisites:** Not open to students declared in the Nursing, Physician Assistant, or Doctor of Pharmacy programs

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

## PHM PRAC 426 – PHARMACY PRACTICE EXPERIENCE I

1 credit.

Designed to introduce student pharmacists to many aspects of pharmacy practice. Participate in a wide-variety of activities to expose them to the role of the pharmacist and the many patient care opportunities that exist in and out of the community pharmacy practice setting. Observe pharmacists in a community pharmacy. Gain a broad understanding of the pharmacist's public health role. Actively participate in assigned teams in a longitudinal experience with an assigned older adult in the community. All of these experiences will be guided by a modified continuing professional development framework (prepare, plan, do, reflect).

**Requisites:** PHARMACY 423

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PHM PRAC 438 – NONPRESCRIPTION MEDICATIONS AND SELF-CARE

2 credits.

Develop knowledge and skills needed to perform triage and make self-care and therapeutic recommendations for self-limiting health conditions commonly encountered in pharmacy practice.

**Requisites:** Declared in the Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PHM PRAC 461 – PATHWAYS IN PHARMACY PRACTICE

1 credit.

Introduction to, and exploration of, contemporary pharmacy practice settings and interprofessional practice, including opportunities for career advancement.

**Requisites:** Declared in Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 462 – PROFESSIONAL DEVELOPMENT AND ENGAGEMENT I- DEVELOPING YOUR PROFESSIONAL IDENTITY**

1 credit.

Develop professional identity and become more engaged with the profession of pharmacy. Explore personal values, skills, and strengths and identify their implications for patient care and professional practice. Engage in continuous professional and interprofessional development to provide patient care that is safe and equitable. Prepare for future introductory pharmacy practice experiences.

**Requisites:** PHM PRAC 461**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 463 – PROFESSIONAL DEVELOPMENT AND ENGAGEMENT II- CULTIVATING SELF- AWARENESS**

1 credit.

Develop professional identity and demonstrate behaviors that regulate personal emotions and support well-being. Identify personal strengths and communicate these strengths to others. Engage in continuous professional and interprofessional development to provide patient care that is safe and equitable.

**Requisites:** PHM PRAC 462**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 464 – PROFESSIONAL DEVELOPMENT AND ENGAGEMENT III: PROMOTING PROFESSIONAL ENGAGEMENT**

1 credit.

Develop professional identity and become more engaged with the profession of pharmacy. Demonstrate behaviors that regulate personal emotions and support well-being. Engage in continuous professional and interprofessional development to provide patient care that is safe and equitable. Prepare for future introductory pharmacy practice experiences.

**Requisites:** PHM PRAC 463**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 465 – PROFESSIONAL DEVELOPMENT AND ENGAGEMENT IV- EMBRACING CONTINUOUS PROFESSIONAL DEVELOPMENT**

1 credit.

Develop professional identity and become more engaged with the profession of pharmacy. Engage in continuous professional and interprofessional development to provide patient care that is safe and equitable; utilize appropriate published evidence to answer clinical questions; and prepare for advanced pharmacy practice experiences.

**Requisites:** PHM PRAC 464**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 467 – INTERPROFESSIONAL COLLABORATIVE PRACTICE IN HIV CARE**

1 credit.

Gain foundational knowledge and skills in interprofessional collaborative practice and HIV care through this unique learning opportunity. Utilizes a blended learning model, and includes in-person sessions, online learning, and supervised clinical experiences. Course participation occurs as part of an interprofessional student team.

**Requisites:** Declared in Nursing BSN (Traditional, Collaborative, Accelerated), Social Work BSW, Medicine MD, Pharmacy PharmD, or Social Work MSW.**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 468 – INTRODUCTION TO PHARMACY INFORMATICS**

1 credit.

Introduction to Pharmacy Informatics, the scientific field that utilizes a systems approach to medication-related data and information, including its acquisition, storage, analysis, and dissemination, in the delivery of optimal medication-related patient care and health outcomes.

**Requisites:** Declared in the Doctor of Pharmacy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 469 – HEALTH EQUITY & SOCIAL JUSTICE FOR HEALTHCARE PROVIDERS**

2 credits.

Social justice seminar focusing on diversity, equity, inclusion, and leadership in the health professions. Focus on historical and contemporary issues in the healthcare system and equip students to develop the awareness, skills, and applied behaviors to impact healthcare inequities at the micro and macro level.

**Requisites:** Nursing BSN (Traditional, Accelerated or Collaborative), senior standing and declared in Health Promotion and Health Equity BS, or graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 471 – EXPLORING PHARMACY PEER MENTOR SEMINAR**

1 credit.

A mentoring, leadership and facilitation class for pharmacy student peer mentors who are assisting instructors of the Exploring Pharmacy courses

**Requisites:** Declared in Doctor of Pharmacy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**PHM PRAC 490 – SELECTED TOPICS IN PHARMACY PRACTICE**

1-4 credits.

Specialized Pharmacy subject matter of current interest to undergraduate and professional students.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM PRAC 526 – PHARMACY PRACTICE EXPERIENCES II**

1 credit.

The second experience of a three-year Introductory Pharmacy Practice Experiences (IPPEs) sequence. Provides opportunities to integrate learning from prior didactic courses such as The Role of the Pharmacist in the Public Health System, Managing Pharmacy Systems for Patient Care, current pharmacotherapy courses, and a previous community IPPE, into observation and discussion of the provision of patient care. Participate in a wide-variety of activities to expose them to the role of the pharmacist and patient care opportunities that exist in and out of the pharmacy practice setting. Focus on the provision of care in an institutional setting along with a variety of pharmacy practice settings which fall under an elective category. Continued exposure to the Pharmacist Patient Care Process (PPCP), which is a framework for providing patient care in a pharmacy practice setting.

**Requisites:** PHM PRAC 426

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 550 – FLUID AND ELECTROLYTE THERAPY**

2 credits.

Clinical management of disorders of fluid, electrolytes, and acid-base in patients with normal and abnormal homeostatic mechanisms. Also included is parenteral nutritional support.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 551 – CLINICAL PHARMACOKINETICS**

1 credit.

Clinical pharmacokinetics includes the application of pharmacokinetics and drug action to the selection and titration of medications. The course includes consideration of patient, disease, and drug factors that affect the concentrations of a medication and its effect, duration of effect, and elimination from the body. Calculation exercises include empiric dose selection and modification of doses based upon therapeutic drug monitoring.

**Requisites:** PHM SCI 421

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 553 – INTEGRATED PHARMACOTHERAPY SKILLS I**

1 credit.

Learn pharmacotherapeutic skills necessary to develop competence as a pharmacist to assume the responsibility to improve therapeutic patient outcomes related to medication use. Skills will include patient communication, identification and resolution of drug related problems, and documentation.

**Requisites:** Declared in Doctor of Pharmacy program with second year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 554 – INTEGRATED PHARMACOTHERAPY SKILLS II**

1 credit.

Learn pharmacotherapeutic skills necessary to develop competence as a pharmacist to assume the responsibility to improve therapeutic patient outcomes related to medication use. Skills will include patient and provider communication, identification and resolution of drug related problems, and documentation.

**Requisites:** PHM PRAC 553 and 555

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 555 – PHARMACOTHERAPY I**

3 credits.

Clinical application of medications in the management of various neurologic and psychiatric disease states. Assessment and therapeutic monitoring of drug therapy with emphasis on the concepts of drug selection, monitoring of drug effect and titration of regimen. Also incorporates issues regarding pharmacokinetics/dynamics, drug interactions, pharmacy practice, and patient education.

**Requisites:** Declared in the Doctor of Pharmacy program with second year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 556 – PHARMACOTHERAPY II**

3 credits.

Clinical application of medications in the management of various disease states. Assessment and therapeutic monitoring of disease states and drug therapy using the concepts of pharmacokinetics/dynamics, drug interactions, pharmacy practice and patient counseling. Topics include cardiovascular and pulmonary therapeutics.

**Requisites:** PHM PRAC 553 and 555

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 559 – INTRODUCTION TO ANTIMICROBIAL PHARMACOTHERAPY**

1 credit.

Preparation for antimicrobial exposure and monitoring during internships to ensure safe and effective patient use of antimicrobials. Exposure to antibiotic-related drug information questions in the community and institution settings and review of primary literature to respond to these questions.

**Requisites:** Declared in Doctor of Pharmacy program with second year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**PHM PRAC 560 – SEMINARS IN ANTIMICROBIAL STEWARDSHIP**

2 credits.

Gain foundational knowledge of the societal implications of antimicrobial resistance and the basic tenets of antimicrobial stewardship in multiple practice settings. Apply these tenets by developing antimicrobial stewardship intervention(s) and design measurement of associated outcomes.

**Requisites:** Declared in the Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 570 – DRUG LITERATURE EVALUATION**

3 credits.

Fundamentals of drug literature and statistical evaluation to enable students to make decisions regarding the clinical use of drugs in their practice.

**Requisites:** Declared in Doctor of Pharmacy program with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC/NURSING 605 – PHARMACOTHERAPEUTICS FOR ADVANCED PRACTICE NURSES**

3 credits.

Pharmacotherapeutics content and application for advanced practice nursing. Emphasis on selection of appropriate therapeutics, development of clinical decision-making skills, and examination of legal, ethical, and safety issues in prescribing medications.

**Requisites:** Declared in a School of Nursing graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 610 – LEADERSHIP IN HEALTH-SYSTEM PHARMACY**

2 credits.

Designed to expose students to personal leadership qualities essential to operate efficiently within an integrated health care delivery system and advance the profession and practice of pharmacy. Students will gain a foundation to become future pharmacy leaders through an understanding of pharmacy's continual evolution in the changing health care environment.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHM PRAC 611 – MEDICAL IMAGING FOR PHARMACISTS**

2 credits.

An overview of the imaging modalities offered in a Hospital Radiology Department. Completion of this course will help students understand the concepts of radiation, how it is used, and some of the tests and medications a patient may encounter when in the Radiology Department of a hospital.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHM PRAC 612 – RADIOPHARMACEUTICALS**

2 credits.

A survey of the clinical diagnostic and therapeutic use of radioactive pharmaceuticals. Included is a review of nuclear physics, radiation biology, radiation chemistry, regulatory issues, and radiation safety, as these areas relate to the synthesis, formulation, dispensing, and administration of radiopharmaceuticals.

**Requisites:** PHM PRAC 611

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 617 – HEALTH SYSTEM PHARMACY DATA ANALYSIS AND INFORMATICS**

2 credits.

Weekly lectures will familiarize the student with pharmacy information systems and the use of data and data processing systems for decision support. Students will complete a data analysis and report project to drive a decision in the hospital.

**Requisites:** Graduate standing or declared in the Doctor of Pharmacy program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 625 – PHARMACY PRACTICE EXPERIENCES III**

2 credits.

Integrates didactic learning with active participation in a wide-variety of patient-care activities under the supervision of a pharmacist preceptor including medication reconciliation, patient consultation, complex medication reviews, documentation, therapeutic drug monitoring and calculations. Continued exposure to the Pharmacist Patient Care Process (PPCP), which is a framework for providing patient care in a pharmacy practice setting.

**Requisites:** PHM PRAC 526**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 626 – PHARMACY PRACTICE EXPERIENCES IV**

2 credits.

Integrates didactic learning with active participation in a wide-variety of patient-care activities under the supervision of a pharmacist preceptor including medication reconciliation, patient consultation, complex medication reviews, documentation, therapeutic drug monitoring and calculations. Continued exposure to the Pharmacist Patient Care Process (PPCP), which is a framework for providing patient care in a pharmacy practice setting.

**Requisites:** PHM PRAC 625**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 628 – PRACTICE INNOVATION I**

1 credit.

Application of foundational knowledge of project management to hands-on experiences planning positive change within the health care system. Students will learn to think strategically, to critically assess a problem, identify solutions, and implement change. Students will integrate concepts in their practice area of interest with the project management skills learned in this course.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 629 – PRACTICE INNOVATION II**

1 credit.

Expand upon the knowledge gained in Practice Innovation I to produce positive change within the health care system. Students will integrate concepts in their practice area of interest with the project management skills learned placing special emphasis on project implementation, measurement, and articulation of results.

**Requisites:** PHM PRAC 628**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 638 – NONPRESCRIPTION PRODUCTS & SELF-CARE**

2 credits.

Provides students with knowledge and skills needed to perform triage and make self-care and therapeutic recommendations for self-limiting health conditions commonly encountered in pharmacy practice.

**Requisites:** PHM PRAC 554, 556 and PHM SCI/PHMCOL-M/PHM SCI 522**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 650 – COMPREHENSIVE IMMUNIZATION DELIVERY**

1 credit.

Addresses vaccine-preventable diseases and the implementation of pharmacy-based immunization delivery programs.

**Requisites:** Declared in the Doctor of Pharmacy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 653 – INTEGRATED PHARMACOTHERAPY SKILLS III**

1 credit.

Learn and build upon pharmacotherapeutic skills necessary to develop competence as a pharmacist to assume the responsibility to improve therapeutic patient outcomes related to medication use. Skills will include patient and healthcare provider communication, identification and resolution of drug related problems, documentation, and complex problem solving skills.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHM PRAC 654 – INTEGRATED PHARMACOTHERAPY SKILLS IV**

1 credit.

Learn and build upon pharmacotherapeutic skills necessary to develop competence as a pharmacist to assume the responsibility to improve therapeutic patient outcomes related to medication use. The course will focus on building complex problem solving skills including the integration of patient and provider communication, documentation, and evaluation of integrated patient cases with a secondary focus on patient profile reviews and comprehensive medication review and assessment.

**Requisites:** PHM PRAC 653 and 655**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 655 – PHARMACOTHERAPY III**

3 credits.

Clinical application of medications in the management of various disease states. Assessment and therapeutic monitoring of disease states and drug therapy using the concepts of pharmacokinetics/dynamics, drug interactions, pharmacy practice and patient counseling. Topics include various renal, endocrine, gastrointestinal, rheumatologic and immunologic disease therapeutics.

**Requisites:** PHM PRAC 554 and 556**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PHM PRAC 656 – PHARMACOTHERAPY IV**

3–4 credits.

Clinical application of medications in the management of various disease states. Assessment and therapeutic monitoring of disease states and drug therapy using the concepts of pharmacokinetics/dynamics, drug interactions, pharmacy practice and patient counseling. Topics include various oncology and infectious disease therapeutics. A one credit elective option will be offered to students and involves academic leadership skill development. Student leaders will lead discussion activities which involve clinical cases, scientific literature review, oncology literature discussions.

**Requisites:** PHM PRAC 653, 655 and PHM SCI 623**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 657 – SEMINARS IN PEDIATRIC PHARMACOTHERAPY**

2 credits.

Addresses the selection, dosing, and monitoring of drugs in children from birth to adolescence. Drugs in pregnancy and lactation are also addressed. The course combines lecture, small group work, and discussion.

**Requisites:** PHM PRAC 656 or concurrent enrollment**Repeatable for Credit:** No**Last Taught:** Spring 2022**PHM PRAC 659 – INFECTIOUS DISEASES PHARMACOTHERAPY IN THE ACUTE CARE SETTING**

1 credit.

Antimicrobial Stewardship has emerged as an important component of patient care in both inpatient and outpatient settings. Pharmacists can play an essential role in Antimicrobial Stewardship through application of knowledge in pharmacology, therapeutics, pharmacokinetics, microbiology, and biotechnology, most often expressed in the acute care setting, where patient health status and therapeutic decision making are ongoing. Addresses the ever-changing skill set required for pharmacists to understand therapeutic options and make effective interventions in the care of infected patients. Emphasis is placed on new treatment modalities as well as challenging the status quo of conventional management principles.

**Requisites:** PHM PRAC 655**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 668 – SEMINARS IN CRITICAL CARE**

2 credits.

Addresses the pharmacotherapeutic management of various critical care conditions. Guest lectures, primary literature review, patient case discussions, student-led presentations, and small group work will be utilized.

**Requisites:** PHM PRAC 550, 555, 556, and 655**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 670 – VETERINARY THERAPEUTICS**

1-2 credits.

Presentation and discussion of topics that involve the therapeutic management of disease states of companion, food, and exotic animals. Emphasis is placed upon the principles of drug regulations, drug therapy, toxicology, and available commercial products.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 671 – INTRODUCTION TO ACADEMIC PHARMACY I**

2 credits.

Introduces students to pharmacy faculty responsibilities. Students will participate in a variety of activities to expose them to the role of the pharmacy educator and will actively participate in the education of DPH-1 or DPH-2 students.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing**Repeatable for Credit:** No**Last Taught:** Fall 2021**PHM PRAC 673 – SEMINARS IN GLOBAL HEALTH PHARMACY**

1 credit.

Explores the contribution of pharmacy and pharmacists to global health initiatives. Topics will be selected and presented by course faculty and students.

**Requisites:** Declared in Doctor of Pharmacy program**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC/NURSING 674 – SEMINARS IN INTERPROFESSIONAL MENTAL HEALTH CARE**

2 credits.

Addresses the team-based and patient-centered care of persons with mental health conditions. A special focus will be put on the management of psychotropic medication regimens. A combination of lecture, discussion, and small group work will be utilized.

**Requisites:** PHM PRAC 555**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHM PRAC 677 – SEMINARS IN CARDIOLOGY**

2 credits.

Seminars, primary literature review, and patient case discussions on selected cardiovascular conditions, including: ACS, HF, valvular disease, cardiac devices, hemodynamic monitoring, heart transplantation, arrhythmias, ACLS, pulmonary arterial hypertension, stroke, and metabolic syndrome.

**Requisites:** Declared in Doctor of Pharmacy program with third year standing**Repeatable for Credit:** No**Last Taught:** Fall 2022



**PHM PRAC 678 – SEMINARS IN ONCOLOGY**

1 credit.

Addresses practical issues surrounding the optimization of medication use in the treatment of patients with cancer. Practical solutions to the everyday challenges of providing exceptional clinical oncology care in a safe, fiscally responsible manner to optimize clinical outcomes of patients with cancer. Included subjects range across clinical, operational, and practice management issues that affect oncology pharmacy practice. These subjects include: pharmacogenomics, cell therapies, oncology research, survivorship, oral chemotherapy management, hazardous drug handling, value of cancer care, specialty pharmacy and Risk Evaluation and Mitigation Strategy (REMS) processes, and transitions of care. Although focused on oncology patients, offers practical exposure to issues confronting the care of patients with other types of diseases.

**Requisites:** Declared in the Doctor of Pharmacy Program with third year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 679 – ADVANCED DIABETES MANAGEMENT**

2 credits.

Enhanced education on diabetes topics; current approaches to the medical management of patients with diabetes including the pharmacist's role in diabetes education and coaching/case management.

**Requisites:** PHM PRAC 655 or (NURSING 312 and NURSING 422)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 691 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**PHM PRAC 692 – SENIOR THESIS**

2 credits.

Individual study for seniors completing theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Repeatable for Credit:** No

**PHM PRAC 699 – ADVANCED INDEPENDENT STUDY**

0-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM PRAC 740 – ACUTE PHARMACEUTICAL CARE CLERKSHIP**

1-6 credits.

Integrates prior didactic course work in pharmacotherapy, pathophysiology, and drug literature evaluation into the provision of pharmaceutical care to hospitalized patients. Participate in the provision of direct pharmaceutical care, by monitoring drug therapy, providing patient counseling, and providing drug information and pharmacokinetic dosing recommendations for patients. Gain experience and insight into health education by interacting with other health professionals and health-professions students.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 741 – AMBULATORY PHARMACEUTICAL CARE CLERKSHIP**

1-6 credits.

Integrates prior course work in pharmacotherapy, pathophysiology, and drug literature evaluation into the provision of pharmaceutical care to ambulatory patients. Activities include conducting patient interviews and assessments, providing drug information to patients and health professionals, and monitoring drug therapy in ambulatory settings.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 742 – HEALTH-SYSTEM PHARMACY PRACTICE CLERKSHIP**

1-6 credits.

Integrates prior didactic course work into the provision of care and the development and delivery of services for hospitalized patients. Exposure to the five pillars of the medication use system (prescribing, transcribing, dispensing, administering, monitoring), plus procurement/storage along with the hospital services and processes that support them. Includes exposure to hospital-based services/programs/committees such as investigational drugs, Pharmacy and Therapeutics, quality/performance improvement (MUE), technologies, and personnel management. Exposure to best-practices, regulatory, legal, and accreditation standards/requirements that influence the quality and delivery of care to hospitalized patients.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 743 – COMMUNITY PHARMACY PRACTICE CLERKSHIP**

1-6 credits.

Develops the skills and judgment necessary to apply the knowledge gained in the basic and clinical sciences to specific patient care situations. In addition, demonstrates the philosophy that clinical (APPE) and distributive pharmaceutical services should be patient oriented and integrated in contemporary ambulatory practice.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC/NURSING/SOC WORK 746 – INTERDISCIPLINARY CARE OF CHILDREN WITH SPECIAL HEALTH CARE NEEDS**

3 credits.

Interdisciplinary team care of children with special health care needs across the trajectory of illness presented within the context of family, culture, social determinants of health, community, and healthcare policy. Students introduced to interdisciplinary, collaborative, family-centered team care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 760 – ELECTIVE PHARMACY PRACTICE CLERKSHIP**

1-6 credits.

Experiential course that integrates prior course work in pharmacotherapy, pathophysiology, and drug literature evaluation into the provision of pharmaceutical care to ambulatory patients. Students will conduct patient interviews and assessments, provide drug information to patients and health professionals, and monitor drug therapy in ambulatory settings.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM PRAC 764 – VETERINARY PHARMACY CLERKSHIP**

1-6 credits.

Practical experience in a veterinary medicine environment with emphasis on the drug treatment of diseases in animals.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 769 – CLINICAL RESEARCH AND PHARMACY INVESTIGATION CLERKSHIP**

1-6 credits.

Gain experience with clinical and translational research in a mentored situation. Learn study design, laboratory techniques, statistical analysis, manuscript preparation, and ethical principles of research.

**Requisites:** Declared in Doctor of Pharmacy program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHM PRAC 961 – GRADUATE SEMINAR IN HEALTH-SYSTEM PHARMACY**

1 credit.

Specialized subject matter of current interest to graduate students in the MS Pharmacy Administration program.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHM PRAC 962 – GRADUATE SEMINAR IN HEALTH-SYSTEM PHARMACY**

1 credit.

Specialized subject matter of current interest to graduate students in the MS Pharmacy Administration program.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHM PRAC 999 – ADVANCED INDEPENDENT STUDY**

1-12 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHILOSOPHY (PHILOS)****PHILOS 101 – INTRODUCTION TO PHILOSOPHY**

3-4 credits.

Introduction to various philosophical questions and to the strategies that philosophers use to address these.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 104 – SPECIAL TOPICS IN PHILOSOPHY FOR FRESHMEN**

3 credits.

Selected topics addressing various philosophical questions and to the strategies that philosophers use to address these.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHILOS 106 – STUDY ABROAD IN PHILOSOPHY**

2-4 credits.

Treatment of a topic in philosophy in a course offered at a university outside the United States.

**Requisites:** None**Course Designation:** Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 1999**PHILOS 141 – THE MEANING OF LIFE**

3-4 credits.

Introduces the subject of philosophy through a question that is familiar to nearly every person: What is the meaning of life? This question will be approached through reading both classical philosophical works and the works of contemporary philosophers.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**PHILOS 201 – INTRODUCTION TO PHILOSOPHY FOR JUNIORS AND SENIORS**

3-4 credits.

Selected topics addressing various philosophical questions and the strategies that philosophers use to address these.

**Requisites:** Junior or senior standing only**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2015**PHILOS 206 – STUDY ABROAD IN PHILOSOPHY**

2-4 credits.

Treatment of a topic in philosophy in a course offered at a university outside the United States.

**Requisites:** None**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**PHILOS 210 – REASON IN COMMUNICATION**

3-4 credits.

Argument in familiar contexts; emphasis upon developing critical skills in comprehending, evaluating, and engaging in contemporary forms of reasoning, with special attention to the uses of argument in mass communication media.

**Requisites:** MATH 96 or placement into MATH 141**Course Designation:** Gen Ed – Quantitative Reasoning Part A Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHILOS 211 – ELEMENTARY LOGIC**

3-4 credits.

The formal characteristics of logical truth and inference.

**Requisites:** Sophomore standing and satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed – Quantitative Reasoning Part B

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHILOS 220 – PHILOSOPHY AND THE SCIENCES**

3-4 credits.

Emphasis will be on understanding the logic of scientific reasoning. Includes the ABCs of deductive logic and probability reasoning, and how to apply these to various central questions in philosophy of science, such as: How are causation and correlation different? What distinguishes science from pseudo-science, religion, and technology? What is a scientific explanation, and what makes one explanation better than another? How do moral issues arise in scientific research and how are they related to the question of whether a theory should be accepted? Philosophical consequences of scientific theories may also be discussed.

**Requisites:** MATH 96 or placement into MATH 141**Course Designation:** Gen Ed – Quantitative Reasoning Part A Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**PHILOS 241 – INTRODUCTORY ETHICS**

3-4 credits.

Nature of moral problems and of ethical theory, varieties of moral skepticism, practical ethics and the evaluation of social institutions.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PHILOS 243 – ETHICS IN BUSINESS**

3-4 credits.

Case studies of moral issues in business; types or reasons appealed to for settlement.

**Requisites:** Sophomore standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 304 – TOPICS IN PHILOSOPHY: HUMANITIES**

3-4 credits.

Examination of selected topics in philosophy.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHILOS 341 – CONTEMPORARY MORAL ISSUES**

3-4 credits.

A philosophical study of some of the major moral issues in contemporary society, such as those concerning abortion, euthanasia, punishment, property, politics, sex, nuclear disarmament, and world hunger.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS/MED HIST 344 – FOOD ETHICS**

3 credits.

There are many ethical issues related to food production, distribution, consumption, and policy, including animal welfare, animal rights, vegetarianism and veganism, environmental impact, treatment of workers, prospects for agricultural reform, ethical responsibilities of corporate and industry actors, and labeling issues surrounding the use of genetically engineered foods. Some are more theoretical, such as which individuals affected by agriculture deserve direct moral consideration. Other are more practical, such as how to feed a growing global population. We will begin with a brief survey of ethical theories and methods of ethical reasoning, and then explore, from both personal and policy perspectives, several food ethics issues. Among the aims of the course are the goals of helping you think critically about the ethically relevant impacts of your own food choices and improving your understanding of ethical issues implicated in food systems.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PHILOS 430 – HISTORY OF ANCIENT PHILOSOPHY**

3-4 credits.

Various philosophers from the presocratics to the Stoics and Epicureans; particular emphasis on Plato and Aristotle.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 432 – HISTORY OF MODERN PHILOSOPHY**

3-4 credits.

Covers various philosophers from the 17th century through early 20th century.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS/JEWISH/RELIG ST 435 – JEWISH PHILOSOPHY FROM ANTIQUITY TO THE SEVENTEENTH CENTURY**

3 credits.

A survey of major philosophers and philosophical currents within Judaism from antiquity through the seventeenth century.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**PHILOS 440 – EXISTENTIALISM**

3-4 credits.

Feeling like life is absurd, that existence is meaningless? Worried that you aren't living authentically? Then a course in Existentialism is just what you need. Study the classic texts of this intellectual movement that expressed despondency about Western civilization, its decadence, and its values. Along the way you'll meet the likes of Kierkegaard, Nietzsche, Heidegger, Sartre, Camus, and De Beauvoir.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHILOS/ENVIR ST 441 – ENVIRONMENTAL ETHICS**

3-4 credits.

Adequacy of ethical theories in handling such wrongs as harm to the land, to posterity, to endangered species, and to the ecosystem itself. Exploration of the view that not all moral wrongs involve harm to humans. Inquiry into the notion of the quality of life and the ethics of the "lifeboat" situation.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHILOS/JEWISH 442 – MORAL PHILOSOPHY AND THE HOLOCAUST**

3 credits.

Selected moral and philosophical issues raised by the Holocaust such as when and whom to rescue; includes issues arising after the annihilation such as forgiveness and reconciliation.

**Requisites:** Sophomore standing or 3 Credits in PHILOS**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**PHILOS 454 – CLASSICAL PHILOSOPHERS**

3 credits.

One or more classical philosophers, movements, or problems selected for intensive study.

**Requisites:** Junior standing or 3 Credits in PHILOS**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PHILOS 481 – JUNIOR HONORS SEMINAR**

3 credits.

One or more philosophers, movements, or problems selected for intensive study.

**Requisites:** Junior standing and declared in an Honors program**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**PHILOS 482 – JUNIOR HONORS SEMINAR**

3 credits.

One or more philosophers, movements, or problems selected for intensive study.

**Requisites:** Junior standing and declared in an Honors program**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**PHILOS/RELIG ST 501 – PHILOSOPHY OF RELIGION**

3-4 credits.

Analysis of religious experience and activity, and examination of principal religious ideas in light of modern psychology, philosophy, science, and anthropology.

**Requisites:** Junior standing or 3 Credits in PHILOS**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**PHILOS/RELIG ST 502 – SPECIAL TOPICS IN PHILOSOPHY OF RELIGION**

3 credits.

One or more topics selected from among the following: religious discourse, God, evil, survival, great philosophers of religion, etc. Variable content.

**Requisites:** Junior standing or 3 Credits in PHILOS**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2013**PHILOS 503 – THEORY OF KNOWLEDGE**

3 credits.

A survey of problems concerning the nature, sources, and limits of human knowledge, including such topics as scepticism, the concept of knowledge, sensory perception, evidence, justified belief, induction.

**Requisites:** Junior standing or 3 Credits in PHILOS**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PHILOS 504 – SPECIAL TOPICS IN THE THEORY OF KNOWLEDGE**

3 credits.

One or more special topics in the Theory of Knowledge or one or more major theories of knowledge. Variable content.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**PHILOS/MED HIST 505 – JUSTICE AND HEALTH CARE**

3 credits.

Examines ethical issues in the distribution, financing, and delivery of health care (primarily in the United States). Explores key issues in U.S. health policy and forms the empirical foundation for the rest of the class. Engages in ongoing debates in moral and political philosophy over putative entitlements to health and health care. Investigates the nature, justifiability, and methods of health care rationing (including bedside rationing by doctors) and the myriad issues implicated by the near-universally shared goal of health care cost containment.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**PHILOS 506 – STUDY ABROAD IN PHILOSOPHY**

2-4 credits.

Treatment of a topic in philosophy in a course offered at a university outside the United States.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2001

**PHILOS 511 – SYMBOLIC LOGIC**

3 credits.

Propositional and predicate logic, with emphasis on metatheory; independence of rules and completeness theorems; discussion of technical and philosophical limitations of classical logic.

**Requisites:** PHILOS 211

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHILOS 512 – METHODS OF LOGIC**

3 credits.

Selected topics in philosophical logic and in the various applications of logic to philosophical problems. Variable content.

**Requisites:** PHILOS 211

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHILOS/MED HIST 515 – PUBLIC HEALTH ETHICS**

3 credits.

Focuses on ethical issues implicated in a population-level approach to disease prevention and health promotion. Explores prominent theoretical approaches to public health ethics and engages with several ethical tensions. Example issues include: the use of coercive or intrusive public health; the justification of paternalistic measures in societies; the extent to which societies should hold individuals responsible for their health conditions; the need to decide who receives life-saving treatment or vaccination; and climate changes and intergenerational justice; ethical issues in international pharmaceutical research.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PHILOS 516 – LANGUAGE AND MEANING**

3 credits.

The nature and function of language, theories of meaning, semantic and syntactic paradoxes, proper names, private languages, rules, and linguistic relativity.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 520 – PHILOSOPHY OF THE NATURAL SCIENCES**

3 credits.

Nature and functions of science; the logic of scientific method; clarification of such concepts as cause, law, theory, probability, determinism, teleology.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**PHILOS 521 – PHILOSOPHY OF THE SOCIAL SCIENCES**

3 credits.

Problems in applying methods and concepts of science to the study of social behavior.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**PHILOS 522 – SPECIAL TOPIC**

3 credits.

Selected from logic of theory construction, theoretical entities, models, applied mathematics, nature of laws, conventionalism, probability, etc. Variable content.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**PHILOS/ENVIR ST 523 – PHILOSOPHICAL PROBLEMS OF THE BIOLOGICAL SCIENCES**

3 credits.

Problems raised by genetics, evolutionary theory, and taxonomy: patterns of explanatory force and dispensability of teleology; objectivity of taxonomy.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PHILOS/ECON 524 – PHILOSOPHY AND ECONOMICS**

3 credits.

Economics examined from the viewpoint of the philosophy of science. Normative and positive aspects of economic theory. Deterministic and statistical explanation. Arrow impossibility theorem. Radical economics.

**Requisites:** Sophomore standing and 3 credits of PHILOS or ECON

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 530 – FREEDOM FATE AND CHOICE**

3 credits.

An examination of the philosophical problems associated with free will.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PHILOS/MED HIST 534 – ETHICS AND THE BRAIN**

3 credits.

In-depth analysis of ethical issues arising from the practices and advances of brain science in clinical, research, legal, and consumer contexts. Includes a foundation in ethical theory and philosophical methodology.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHILOS 541 – MODERN ETHICAL THEORIES**

3 credits.

Ethical theories and problems as discussed in the late nineteenth and twentieth centuries.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 543 – SPECIAL TOPICS IN ETHICS**

3 credits.

Intensive study of ethical theory, or of one or more ethical theories or moral philosophers of the present or modern period. Variable content.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**PHILOS/ED POL 545 – PHILOSOPHICAL CONCEPTIONS OF TEACHING AND LEARNING**

3 credits.

Examination and analysis of conceptions of teaching and learning in classical philosophical works and in contemporary literature in the philosophy of education.

**Requisites:** Junior standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 549 – GREAT MORAL PHILOSOPHERS**

3 credits.

Major themes of moral philosophy, from Plato and Aristotle to Bentham and Mill, with critical study of outstanding works.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS/ED POL 550 – PHILOSOPHY OF MORAL EDUCATION**

3 credits.

Critical examination of classical and contemporary conceptions of moral education.

**Requisites:** Junior standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**PHILOS 551 – PHILOSOPHY OF MIND**

3 credits.

Nature of mind (mental states such as thinking and feeling) and its relation to physical states, with emphasis on recent advances in philosophy and psychology.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 553 – AESTHETICS**

3 credits.

Analysis of current philosophies of art and of criticism.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**PHILOS 555 – POLITICAL PHILOSOPHY**

3 credits.

Philosophical doctrines involved in justification of political decisions; analysis of some fundamental concepts, e.g. the common good, authority, justice, natural law, natural rights.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 556 – TOPICS IN FEMINISM AND PHILOSOPHY**

3 credits.

Topics from historical and contemporary feminist thought; attention to one or more feminist philosophers, historical movements, philosophical frameworks, or sets of philosophically related issues.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**PHILOS 557 – ISSUES IN SOCIAL PHILOSOPHY**

3 credits.

Specific topics in social and political philosophy such as war and peace, property and industry, individualism and collectivism, freedom and justice.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**PHILOS/MED HIST 558 – ETHICAL ISSUES IN HEALTH CARE**

3 credits.

Ethical issues apparently created by new biomedical technologies, such as genetic screening, prenatal diagnosis, prolongation of life, treatment of severe birth defects, in vitro fertilization, behavior modification, psychosurgery, and transplantation.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHILOS 560 – METAPHYSICS**

3 credits.

Major problems in metaphysics, such as: existence, universals and particulars, space and time, individuals, categories, substance and attribute, necessity.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHILOS 562 – SPECIAL TOPICS IN METAPHYSICS**

3 credits.

An intensive study of one or more topics such as: existence, universals and particulars, space and time, individuals, individuation, categories, substance and attribute, necessity, events and processes.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHILOS/AGRONOMY/C&E SOC/MED HIST 565 – THE ETHICS OF MODERN BIOTECHNOLOGY**

3 credits.

An in-depth study of a selection of ethical issues arising from the application of modern biotechnology to microorganisms, plants, non-human animals, and human beings. We will aim at a discussion that is informed by empirical research and by work done in ethical theory, political philosophy, and other relevant disciplines, and whose character is rigorous, clear, nuanced, and unbiased.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHILOS 566 – PHILOSOPHY OF ACTION**

3 credits.

Human beings, and perhaps other kinds of creatures, are agents: we can make things happen. We do things intentionally, guide our behavior in light of our reasons, exhibit self-control, and plan for the future. What is it to be an agent, and what makes an event an intentional action? As Wittgenstein put the question, "What is left over if I subtract the fact that my arm goes up from the fact that I raise my arm?" Emphasis on contemporary readings, including Donald Davidson and G.E.M. Anscombe.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**PHILOS 567 – TOPICS IN CONTEMPORARY PHILOSOPHY**

3 credits.

One or more specific topics in contemporary philosophy bridging two or more areas such as epistemology, metaphysics, philosophy of mind, philosophy of language, or moral philosophy.

**Requisites:** Junior standing and completion of 3 credits in PHILOS

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**PHILOS/MATH 571 – MATHEMATICAL LOGIC**

3 credits.

Basics of logic and mathematical proofs; propositional logic; first order logic; undecidability.

**Requisites:** (MATH 234 or 375), (MATH 320, 340, 341, or 375), and (MATH 341, 375, 421, 467, or 521), or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHILOS 581 – SENIOR HONORS SEMINAR**

3 credits.

Individual study for seniors completing theses for honors in the major, as arranged with a faculty member.

**Requisites:** Senior standing and declared in an Honors program

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**PHILOS 582 – SENIOR HONORS SEMINAR**

3 credits.

Individual study for seniors completing theses for honors in the major, as arranged with a faculty member.

**Requisites:** Senior standing and declared in an Honors program

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**PHILOS 599 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHILOS 681 – SENIOR HONORS THESIS**

1-3 credits.

Individual mentored study for seniors completing theses for honors in the major, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **PHILOS 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for honors in the major, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PHILOS 691 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

### **PHILOS 692 – SENIOR THESIS**

3 credits.

Individual mentored study for seniors completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

### **PHILOS 698 – DIRECTED STUDY**

2-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **PHILOS 699 – DIRECTED STUDY**

2-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **PHILOS 701 – READING SEMINAR**

3 credits.

An examination of select topics in philosophy.

**Requisites:** Declared in Philosophy graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PHILOS 799 – DIRECTED STUDY**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

### **PHILOS/CLASSICS 830 – ADVANCED HISTORY OF PHILOSOPHY**

3 credits.

Seminar on the history of philosophy focusing on a period or figure(s).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PHILOS 835 – ADVANCED HISTORY OF PHILOSOPHY**

3 credits.

Seminar on the history of philosophy focusing on a period or figure(s).

**Requisites:** Declared in Philosophy graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **PHILOS 902 – PROSEMINAR IN PHILOSOPHY**

3 credits.

Survey of various texts with an emphasis on close reading and developing writing skills.

**Requisites:** Declared in Philosophy graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PHILOS 903 – SEMINAR: EPISTEMOLOGY**

3 credits.

Seminar on epistemology.

**Requisites:** Declared in Philosophy graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**PHILOS 904 – TEACHING PHILOSOPHY**

1 credit.

Focuses on the conceptual and ethical recognition of the importance of good teaching, and skills and knowledge drawn from up-to-date pedagogical research. Engages with complex questions about the purposes of higher education and your role in it to better understand your own beliefs, attitudes, and values regarding higher education. Use best practices in teaching and learning in a low-stakes environment to practice and receive feedback on your performance of those skills.

**Requisites:** Declared in a Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHILOS 911 – SEMINAR-LOGIC**

3 credits.

Seminar on logic.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**PHILOS 916 – SEMINAR-PHILOSOPHY OF LANGUAGE**

3 credits.

Seminar on philosophy of language.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**PHILOS 920 – SEMINAR-PHILOSOPHY OF SCIENCE: CAUSATION, EXPLANATION & PROBABILITY**

3 credits.

Seminar on philosophy of science.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PHILOS 941 – SEMINAR-ETHICS**

3 credits.

Seminar on ethics.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHILOS 951 – SEMINAR-PHILOSOPHY OF MIND**

3 credits.

Seminar on philosophy of mind.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHILOS 955 – SEMINAR SOCIAL AND POLITICAL PHILOSOPHY**

3 credits.

Seminar on social and political philosophy.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**PHILOS 960 – METAPHYSICS SEMINAR**

3 credits.

Seminar on metaphysics.

**Requisites:** Declared in Philosophy graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHILOS 990 – RESEARCH AND THESIS**

2-9 credits.

Individual mentored study for graduate students completing theses, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHILOS 999 – INDEPENDENT WORK**

2-9 credits.

Individual mentored study for graduate students, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

# PHYSICAL THERAPY (PHY THER)

## PHY THER 500 – FUNCTIONAL NEUROANATOMY FOR PHYSICAL THERAPY

3 credits.

Development, structure, regions and function of the nervous system are covered with the purpose of providing insight into the clinical treatment of common neurological conditions. General principles of the development, connectivity and blood supply of both the central and peripheral nervous system (spinal cord, brainstem, and above the brainstem) are taught.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PHY THER 501 – ANATOMICAL APPLICATIONS IN PHYSICAL THERAPY

3 credits.

Application of anatomy and palpatory skills in a clinically-oriented environment. Focus is on applied anatomy, kinesiology, posture, movement analysis, medical terminology.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

## PHY THER 512 – PRINCIPLES OF PROFESSIONAL PRACTICE AND ADMINISTRATION

3 credits.

Ethics, organization and administration of physical therapy departments. Planning and correlation of hospital and community health services. Study background, organization and responsibilities of health care team members in hospital services and programs.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PHY THER 521 – PHYSICAL AGENTS

2 credits.

The scientific rationale for and the clinical application of thermal, electrical, and mechanical agents in physical therapy practice.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

## PHY THER 523 – CARDIOVASCULAR AND PULMONARY ASPECTS OF PHYSICAL THERAPY TREATMENT

3 credits.

Covers: 1) methods used in physical therapy (PT) management of cardiovascular and pulmonary disease, 2) influence of coexisting cardiovascular and pulmonary dysfunction on PT treatment for other primary diagnoses, and 3) screening for occult cardiovascular and pulmonary disease.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PHY THER 527 – FOUNDATIONS OF PHYSICAL THERAPY: EXAMINATION AND EVALUATION

4 credits.

Lab-based course that introduces history taking and physical examination skills germane to assessment of patients with orthopedic and neurologic diagnoses in inpatient and outpatient settings. Introduces clinical decision-making and documentation skills with a focus on examination tests and measures. Labs involve the psychomotor application of exam skills. Outside activities with community partners are an integral part of the course.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PHY THER 534 – FOUNDATIONS OF PHYSICAL THERAPY INTERVENTION

4 credits.

Examination for exercise design, implementation, and progression. Range of motion, flexibility, joint mobilization, balance/gait training, proprioceptive neuromuscular facilitation, balance, coordination, agility training, body mechanics, postural stabilization, resistive and endurance training, aquatic therapy, relaxation, manual traction, massage. Scientific rationale for treatment interventions.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PHY THER 538 – INTRODUCTION TO THE PHYSICAL THERAPY PROFESSION AND PROFESSIONALISM

1 credit.

Professional attitudes, beliefs, behaviors relevant to physical therapy practice through the Guide to Physical Therapist Practice, APTA history, Generic Abilities, APTA Code of Ethics, APTA Core Values, PT roles and practice settings, professional autonomy, health care teams, professional learning opportunities.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022



**PHY THER 539 – PHYSICAL THERAPY EDUCATION AND LIFESPAN LEARNING ISSUES**

1 credit.

Instructional design, learning theories and styles throughout the lifespan, literacy issues, professional presentations and posters, the physical therapist as educator, professional behaviors and emotional preparation for the clinic.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHY THER 540 – PSYCHOSOCIAL ASPECTS OF HEALTH CARE**

1 credit.

Professional attitudes, beliefs and behaviors relevant to physical therapy practice. Communication issues related to caregiving, multidisciplinary teams, conflict management, body image, psychosocial aspects of aging, stages of loss, collaborative care, and family-centered care.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 541 – ISSUES OF CULTURE AND DIVERSITY IN HEALTH CARE**

1 credit.

Students will explore their own backgrounds and will learn constructs of cultural competency; cultural beliefs and practices; impact of diversity issues such as SES, sexual preference, disability, educational level, ethnicity and race; and the culture of medicine.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY THER 542 – MEDICAL ETHICS, JURISPRUDENCE, AND HEALTH CARE REGULATIONS**

1 credit.

Provides an introduction to medical ethics and jurisprudence as they apply to physical therapy. Includes information on health care regulatory agencies and health care regulations.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY THER 543 – PROFESSIONAL PRACTICE ISSUES IN PHYSICAL THERAPY**

1 credit.

The final of six seminar courses, this course will present issues that will assist the physical therapist student transition into the profession during and following their final clinical internships.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 627 – CLINICAL DECISION-MAKING: TISSUE MECHANICS AND ADAPTATIONS**

3 credits.

Addresses the cardiovascular, pulmonary, neuromuscular and connective tissue properties and adaptations that influence human movement through the lifespan. Through an understanding of the system integration, gain an appreciation of the physiological complexities underlying human movement.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY THER 628 – CLINICAL DECISION MAKING: NEUROMUSCULAR MECHANICS AND CONTROL**

4 credits.

Addresses the mechanics and control of the neuromuscular and skeletal systems as they relate to human movement. Neural control of movement is discussed in detail with specific emphasis on theories underlying recruitment of muscle in health and disease.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 635 – MOTOR CONTROL DYSFUNCTION : EXAMINATION, DIAGNOSIS, AND MANAGEMENT I**

5 credits.

Application of motor control and motor learning principles to the examination, diagnosis, and management of people with movement disorders stemming from CNS pathology. Emphasis on neurological interventions across the lifespan.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY THER 636 – MOTOR CONTROL DYSFUNCTION: EXAMINATION, DIAGNOSIS, AND MANAGEMENT II**  
5 credits.

Application of motor control and motor learning principles to the examination, diagnosis, and management of people with movement disorders from spinal cord injuries, PNS dysfunction and progressive disorders of the CNS.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 640 – SCIENTIFIC INQUIRY IN PHYSICAL THERAPY**  
3 credits.

Focuses on critical evaluation of research findings, a fundamental component of evidence-based practice. Examples from the rehabilitation literature are used to illustrate principles of measurement theory, research design, statistical analysis, and scientific inference.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 641 – CURRENT ISSUES IN REHABILITATION**  
1 credit.

Focuses on critical evaluation of published research relevant to physical therapy. In seminar format, present the results of original research, and lead discussions of the strengths, weaknesses, and underlying theory of the research.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHY THER 642 – RESEARCH PRACTICUM**  
1-3 credits.

An in-depth training in various aspects of research (e.g., literature review, understanding of study methodology, data collection, data reduction and analysis, dissemination of findings). Work independently under the supervision of a faculty member from the UW Doctor of Physical Therapy program and will participate in an on-going project for the semester.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHY THER 643 – CURRENT ISSUES IN REHABILITATION RESEARCH II**  
1 credit.

Focuses on critical evaluation of published research relevant to physical therapy. In seminar format, present the results of original research, and lead discussions of the strengths, weaknesses, and underlying theory of the research.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 664 – CLINICAL MEDICINE I**  
5 credits.

Modules in medical screening, pharmacological principles, diagnostic imaging, laboratory testing, psychological disorders, ENT, endocrinology, dermatology, and geriatrics are presented in the context of pathophysiology, differential diagnosis, prevention, and management. Lectures provided by physicians, physician assistants and physical therapists. Case studies are utilized for development of clinical problem solving skills.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY THER 665 – CLINICAL MEDICINE II**  
4 credits.

Common pathological processes, risk factors, clinical manifestations, and pathogenesis of disease for the cardiovascular, pulmonary, hematology, neurology, gastrointestinal, urological, gynecological, musculoskeletal, and rheumatological systems. Medical tests and treatments including medications, diagnostic imaging, and pharmacology principles will also be covered.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHY THER 668 – HEALTH PROMOTION AND WELLNESS**  
2 credits.

Physical, psychological, spiritual, social, emotional, intellectual and vocational aspects of wellness. The physical therapist's role in primary, secondary and tertiary prevention; health promotion, and individual and community screening activities for wellness/fitness; and safety and environmental considerations for health and wellness.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY THER 675 – OTHOTICS: APPLICATIONS IN PHYSICAL THERAPY PRACTICE**

2 credits.

Provides the the cognitive, affective and psychomotor skills for efficacious examination/evaluation and treatment of patients with conditions requiring orthotic, protective and supportive devices. Specific orthotic topics include: material technology; biomechanics of orthoses; orthotic design and fabrication principles, lower limb orthoses (LLO); spinal orthoses (SO); upper limb orthoses (ULO); and wheelchair seating and propulsion. Provides the foundation for clinical applications in the musculoskeletal (PHY THER 676/677) and neuromuscular clinical tracts (PHY THER 635/636).

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY THER 676 – MUSCULOSKELETAL DYSFUNCTION : EXAMINATION, DIAGNOSIS, & MANAGEMENT I**

5 credits.

Provides the physical therapy student with the cognitive, affective, and psychomotor knowledge for effective examination, evaluation, diagnosis and management of patients/clients of all ages with various musculoskeletal dysfunctions related specifically to the spine.

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHY THER 677 – MUSCULOSKELETAL DYSFUNCTION : EXAMINATION, DIAGNOSIS, & MANAGEMENT II**

5 credits.

Provides the physical therapy student with the cognitive, affective, and psychomotor knowledge for effective examination, evaluation, diagnosis and management of patients/clients of all ages with various musculoskeletal dysfunctions related specifically to the extremities.

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY THER 678 – PHYSICAL THERAPY MANAGEMENT OF INTEGUMENT CONDITIONS**

1 credit.

Provides the cognitive, affective and psychomotor skills for efficacious examination/evaluation and treatment of specific integument system conditions. Topics include the management of patients/clients with wounds, burn, frostbite, insensate and/or diseased integument. Functional training in self-care and home management including activities of daily living and instrumental activities of daily living, as well as in the context of patients with specific integument conditions. Specific wound topics include: infection control in the health care environment, classification of wounds, examination and physical therapy and medical management of persons with wounds. Specific burn topics include: epidemiology of thermal injuries; classification of burn depth; determination of percentage burn; physiological effects of burn by body system; interdisciplinary medical management and physical therapy management for persons with burns/frostbite.

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY THER 679 – PROSTHETICS: APPLICATIONS IN PHYSICAL THERAPY PRACTICE**

1 credit.

Provides the cognitive, affective and psychomotor skills for efficacious examination/evaluation and treatment of patients/clients with amputation. Course topics include the management of patients/clients with congenital and/or acquired amputation and its subsequent prosthetic management. Functional training in self-care and home management including activities of daily living (ADLs) and instrumental activities of daily living (IADLs), as well as functional training in work (job/school/play) are covered in the context of patients with limb loss.

**Requisites:** PHY THER 676 and PHY THER 677**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY THER 700 – CLINICAL INTERNSHIP I**

2 credits.

80-hour physical therapy internship in a pre-determined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY THER 701 – CLINICAL INTERNSHIP II**

4 credits.

160-hour physical therapy internship in a predetermined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022

**PHY THER 702 – CLINICAL INTERNSHIP III**

9 credits.

Nine-week physical therapy internship in a pre-determined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY THER 703 – CLINICAL INTERNSHIP IV**

9 credits.

Nine-week physical therapy internship in a pre-determined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY THER 704 – CLINICAL INTERNSHIP V**

4-9 credits.

Physical therapy internship in a pre-determined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Fall 2022

**PHY THER 705 – CLINICAL INTERNSHIP VI**

9 credits.

Nine-week physical therapy internship in a pre-determined clinical environment.

**Requisites:** Declared in Doctor of Physical Therapy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER 706 – CLINICAL INTERNSHIP VII**

5 credits.

Learning experiences in a clinical setting under the direct guidance of a physical therapist (Clinical Instructor). Ability to perform physical therapy examinations of body structures and functions, and other evaluations, interventions, and outcomes assessed by evaluative tools, such as the Clinical Performance Instrument (CPI).

**Requisites:** PHY THER 679

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY THER/NURSING/PHARMACY/PHY ASST/PUBLHLTH 758 – INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP**

1 credit.

Build skills in collaboration, problem solving, and reflection to approach complex community-based public health problems contribute to becoming a public leader. Explore the six levels of public health leadership through the practices of current and past public health leaders, case studies, and personal experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PHY THER 799 – INDEPENDENT STUDY**

1-3 credits.

Course content is designed specifically for the individual student.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## PHYSICIAN ASSISTANT PROGRAM (PHY ASST)

**PHY ASST 550 – FUNDAMENTALS OF CLINICAL MEDICINE**

3 credits.

Introduces information fundamental to understanding clinical medicine principles. Topics addressed include select areas of physiology-pathophysiology, pharmacology, laboratory medicine, and common systemic disease processes. There will also be instruction relative to cognitively approaching the patient.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY ASST 601 – CLINICAL MEDICINE I**

5 credits.

Covers the knowledge and skills required to diagnose and treat patient health problems. Topics include genomics, neurology, psychiatry, hematology/oncology, endocrinology, ophthalmology, otorhinolaryngology, and dermatology.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY ASST 602 – CLINICAL MEDICINE II**

6 credits.

Covers the knowledge and skills required to diagnose and treat patient health problems. Topics addressed include cardiology, pulmonology, nephrology/urology, gastroenterology, rheumatology, geriatrics, and family medicine.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 603 – PEDIATRICS**

2 credits.

Examines important aspects of primary care pediatrics including assessment of the child patient, preventive health, and pediatric diseases and conditions. The student will also learn examination techniques specific to the pediatric population.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY ASST 610 – CLINICAL PREVENTION AND COMMUNITY PRACTICE I**

1 credit.

Addresses the concepts of prevention and population health. Multiple topics will be explored including but not limited to: Health Information Literacy, Immunizations, Nutrition, Exercise, Communication and Counseling Skills, and Integrative Medicine.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHY ASST 611 – CLINICAL PREVENTION AND COMMUNITY PRACTICE II**

1 credit.

Addresses the concepts of prevention and population health and explores the topics of: health systems/policy, and community aspects of practice. Case examples and community-oriented learning experiences will be incorporated into the course.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY ASST 616 – PROFESSIONAL SEMINAR I**

1 credit.

Emphasizes an understanding of basic research methodology, project development, collaborative research, and project evaluation.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY ASST 617 – PROFESSIONAL SEMINAR II**

1 credit.

Emphasizes medical ethics as well as fundamental principles of evidence-based medicine. Research and statistical concepts are taught within the framework of epidemiologic study to develop skills in evaluating and interpreting the medical literature.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHY ASST 618 – PROFESSIONAL SEMINAR III**

1 credit.

Emphasizes an understanding of basic research methodology, project development, collaborative research, and project evaluation.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY ASST 619 – HISTORY AND PHYSICAL EXAMINATION FOR PHYSICIAN ASSISTANTS**

4 credits.

Provides the primary care physician assistants with the knowledge and physical exam skills to evaluate patients in a variety of settings. Normal and pathological physical findings are discussed. Master interview skills and physical exam skills applicable to all patients. Selected physical exam techniques are emphasized.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY ASST 620 – ADVANCED PATIENT EVALUATION I**

1 credit.

Advanced physical examination and patient evaluation techniques with an emphasis on the musculoskeletal system; selected physical exam procedures in the complete evaluation of patients; advanced medical interviewing skills.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHY ASST 621 – ADVANCED PATIENT EVALUATION IN THE PRIMARY CARE SETTING II**

1 credit.

Instruction in advanced skills in history and physical examination including comprehensive patient history and physical examination, focused history with related male genitalia and rectal exams, and focused history with female breast and pelvic exams.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHY ASST 629 – APPLIED HUMAN ANATOMY FOR PHYSICIAN ASSISTANTS**

7 credits.

Gross human anatomy involving complete dissection of the human body. Major topic areas: Thorax; abdomen and pelvis; head and neck; limbs. Focus on anatomical organization of the trunk, head and neck, and limbs. Application of functional anatomical information to clinical practice/problems. Practice in teamwork and teaching.

**Requisites:** Declared in Physician Assistant program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHY ASST 630 – WOMEN'S HEALTH FOR PHYSICIAN ASSISTANTS**

3 credits.

Provides a theoretical and clinical background for the assessment, diagnosis and management of problems in obstetrics and gynecology.

**Requisites:** Declared in Physician Assistant program**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PHY ASST 640 – CLINICAL PHARMACOLOGY I**

2 credits.

Emphasizes pharmacotherapeutics relative to disease processes of the neurologic, psychiatric, hematologic/oncologic, ophthalmologic, otolaryngologic, endocrinologic, and dermatologic systems. Antimicrobial and pain management principles will also be addressed.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY ASST 641 – CLINICAL PHARMACOLOGY II**

2 credits.

Emphasizes pharmacotherapeutics relative to disease processes of the cardiovascular, pulmonary, renal, urologic, gastrointestinal, and rheumatologic systems. Other topics addressed include geriatric pharmacology, pharmacoeconomics, complementary and alternative medicines, and treatment of sexually transmitted infections.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 648 – EMERGENCY MEDICINE**

2 credits.

Fundamental concepts related to the provision of emergency medical care and urgent ambulatory care.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 650 – DIAGNOSTIC METHODS I**

2 credits.

Primary focus is laboratory medicine assessments and ECG interpretation with additional content in imaging modalities, utilization of survey tools, screening assessments, as well as selected specialized examination techniques.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY ASST 651 – DIAGNOSTIC METHODS II**

3 credits.

Primary focus is laboratory medicine assessments, heart sounds interpretation, and imaging modalities.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 660 – CLINICAL SKILLS LABORATORY**

1 credit.

Hands-on clinical skill laboratory that includes: dermatologic procedures, splinting, casting, suturing, IV access, venipuncture, injections, joint aspiration/injection, and advanced cardiac life support (ACLS).

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 662 – PREPARATION FOR INTERDISCIPLINARY HEALTH CARE IN BELIZE**

1 credit.

Preparation for PHY ASST 663. Examination of important and ever-changing topics related to global healthcare. Focus on the more remote, indigenous populations of Belize, their current healthcare system and their access-to-care. Content relates to historical, social, economic and cultural perspectives of the under-served Belizean populations, as well as medical-related topics from an interdisciplinary perspective. Activities and self-study exercises include team-building and self-reflection exercises. Specific topics will include; Belize anthropology, health care in a resource limiting setting, human trafficking, cervical cancer, etc.

**Requisites:** Declared in Physician Assistant, Nursing Practice DNP, or Pharmacy Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 663 – INTERDISCIPLINARY FIELD EXPERIENCE IN RURAL BELIZE**

1 credit.

One-week service-learning field experience in rural Belize. Provide health care to the more remote, indigenous populations of Belize. Must have a valid passport that does not expire 6 months past your Belize field experience dates.

**Requisites:** PHY ASST 662

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 670 – FUNDAMENTALS OF SURGERY**

1 credit.

An introduction to the role of the physician assistant in surgery, fundamental principles of pre-, intra- and post-operative surgical care, operating room aseptic technique, and common strategies to avoid and to treat surgical complications.

**Requisites:** Declared in Physician Assistant program

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY ASST 699 – INDEPENDENT STUDY**

1-3 credits.

Directed study projects as arranged with instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**PHY ASST 700 – RURAL HEALTH FOR PHYSICIAN ASSISTANTS**

1 credit.

Realizing the rural healthcare shortage, emphasizes an understanding of healthcare issues unique to rural populations with the intent to attract Physician Assistants to work in these underserved areas.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2015

**PHY ASST 716 – PROFESSIONAL SEMINAR IV**

1 credit.

Emphasis will be on placed on refining the capstone project and writing an initial paper draft. Also includes instructional content on professional issues in preparation for clinical experiences and clinical practice.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PHY ASST 717 – PROFESSIONAL SEMINAR AND CAPSTONE I**

1 credit.

Emphasis will be placed on completion of capstone projects with preparations for oral and poster presentation of the projects. Also includes instructional content on professional issues in preparation for certification and clinical practice.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHY ASST 718 – PROFESSIONAL SEMINAR AND CAPSTONE II**

1 credit.

Emphasis will be placed on preparing poster and lecture presentation for completed capstone projects. Also includes instructional content on professional issues in preparation for certification and clinical practice.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 729 – PHYSICIAN ASSISTANT PRECEPTORSHIP: SURGERY**

8 credits.

A 2 month intensive clinical learning experience with an emphasis in surgery and taking place in a variety of off-campus clinical settings under the direction of a supervising physician preceptor.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHY ASST 739 – PHYSICIAN ASSISTANT PRECEPTORSHIP: FAMILY MEDICINE**

8 credits.

A 2 month intensive clinical learning experience with an emphasis in family medicine and taking place in a variety of off-campus clinical settings under the direction of a supervising physician preceptor.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHY ASST 749 – PHYSICIAN ASSISTANT PRECEPTORSHIP: INTERNAL MEDICINE**

8 credits.

A 2 month intensive clinical learning experience with an emphasis in internal medicine and taking place in a variety of off-campus clinical settings under the direction of a supervising physician preceptor.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHY ASST/NURSING/PHARMACY/PHY THER/PUBLHLTH 758 – INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP**

1 credit.

Build skills in collaboration, problem solving, and reflection to approach complex community-based public health problems contribute to becoming a public leader. Explore the six levels of public health leadership through the practices of current and past public health leaders, case studies, and personal experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PHY ASST 759 – PHYSICIAN ASSISTANT PRECEPTORSHIP: EMERGENCY MEDICINE**

8 credits.

A 2 month intensive clinical learning experience with an emphasis in emergency medicine and taking place in a variety of off-campus clinical settings under the direction of a supervising physician preceptor.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 769 – PHYSICIAN ASSISTANT PRECEPTORSHIP: ELECTIVE**

8 credits.

A 2 month intensive clinical learning experience with an emphasis in an elective specialty discipline and taking place in a variety of off-campus clinical settings under the direction of a supervising physician preceptor. Elective specialty disciplines include but are not limited to family medicine, internal medicine, emergency medicine, general surgery, cardiothoracic surgery, orthopedic surgery, ENT, dermatology, pediatrics, women's health and psychiatry/behavioral health.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHY ASST 787 – SEMINAR ON INTEGRATING PUBLIC HEALTH INTO PA PRACTICE**

1 credit.

Provides direction to Physician Assistant (PA) Path of Distinction (PoD) students for the PoD capstone project and to provide an overview of public health, some of its current issues and tools to help become engaged in the communities in which clinical experiences and practice takes place.

**Requisites:** Declared in Physician Assistant program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

# PHYSICS (PHYSICS)

**PHYSICS 103 – GENERAL PHYSICS**

4 credits.

Introduction to physics at the non-calculus level. Principles of mechanics, heat, and waves, with applications to a number of different fields. Not recommended for students in the physical sciences and engineering.

**Requisites:** MATH 112, 113, 114, 171, placement into MATH 211 or 221, or special student standing. Not open to students with credit for PHYSICS 201, 207, or 247.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 104 – GENERAL PHYSICS**

4 credits.

Continuation of PHYSICS 103. Principles of electricity and magnetism, light, optics, and modern physics, with applications to a number of different fields. Not recommended for students in the physical sciences and engineering.

**Requisites:** PHYSICS 103, 201, 207, 247, E M A 201 or special student standing. Not open to students with credit for PHYSICS 202, 208, or 248.

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 106 – PHYSICS OF SPORTS**

3 credits.

A tenth of a second, a single inch, or a slightly different angle can make all the difference in a sporting event. Application of physical principles to competitive sport, leading to a better understanding of performances in such sports as track and field, cycling, archery, golf, football and basketball.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for PHYSICS 103, 201, 207, or 247.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 107 – THE IDEAS OF MODERN PHYSICS**

3 credits.

The twentieth-century physical world picture and its origins. Selected topics in classical physics, relativity, and the quantum theory with emphasis on the meaning of basic concepts and their broader implications, rather than practical applications.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement or special student standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 109 – PHYSICS IN THE ARTS**

3 credits.

The nature of sound and sound perception; fundamentals of harmony, musical scales, and musical instruments. Studies of light including lenses, photography, color perception, and color mixing.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement or special student standing. Not open to students with credit for PHYSICS 371.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 115 – ENERGY AND CLIMATE**

3 credits.

Introduction to energy, focusing on energy sources and their impacts on humans and the environment, particularly through climate change. Develop basic physics skills to form opinions on energy-related issues affecting the world as well as your own use of energy. Apply the physical principles of mechanics, heat, electricity, and atomic nuclei to various energy sources (fossil fuels, renewables, and nuclear) and their impacts.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for PHYSICS 103, 201, 207, or 247.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 198 – DIRECTED STUDY**

1-3 credits.

Introductory-level mentored research project in physics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHYSICS 199 – DIRECTED STUDY**

1-3 credits.

Introductory-level mentored research project in physics.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHYSICS 201 – GENERAL PHYSICS**

5 credits.

Calculus-based introduction to physics intended for engineering students. Mechanics: kinematics, statics, dynamics; energy and momentum.

**Requisites:** MATH 217, 221, or 275. Not open to students with credit for PHYSICS 207 or 247.

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Physical Sci. Counts toward the Natural Sci req  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 202 – GENERAL PHYSICS**

5 credits.

Calculus-based introduction to physics intended for engineering students. Electricity, magnetism, light, and sound.

**Requisites:** (PHYSICS 103, 201, 207, 247, or E M A 201) and (MATH 217, 221, or 275). Not open to students with credit for PHYSICS 208 or 248.

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 205 – MODERN PHYSICS FOR ENGINEERS**

3 credits.

Introduction to atomic, solid state, and nuclear physics.

**Requisites:** PHYSICS 202, 208 or 248. Not open to students with credit for PHYSICS 241, 244, or 249.

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PHYSICS 206 – SPECIAL TOPICS IN PHYSICS**

1-5 credits.

Special topics in physics at the intermediate undergraduate level.

**Requisites:** (PHYSICS 103, 201, 207 or 247) and (MATH 217, 221, or 275)

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHYSICS 207 – GENERAL PHYSICS**

5 credits.

Calculus-based introduction to physics intended for students majoring in biological sciences. Mechanics: kinematics, statics, dynamics; energy and momentum. Heat and sound.

**Requisites:** MATH 217, 221, or 275. Not open to students with credit for PHYSICS 201 or 247.

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 208 – GENERAL PHYSICS**

5 credits.

Continuation of PHYSICS 207: calculus-based introduction to physics intended for students majoring in biological sciences. Electricity, magnetism, light, and modern physics.

**Requisites:** PHYSICS 201, 207, 247, E M A 201, or (PHYSICS 103 and MATH 217, 221, or 275). Not open to students with credit for PHYSICS 202 or 248.

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS/E C E 235 – INTRODUCTION TO SOLID STATE ELECTRONICS**

3 credits.

An introduction to the physical principles underlying solid-state electronic and photonic devices, including elements of quantum mechanics, crystal structure, semiconductor band theory, carrier statistics, and band diagrams. Offers examples of modern semiconductor structures. Prior experience with MATLAB [such as E C E 203] is strongly encouraged but not required.

**Requisites:** (MATH 222 or 276) and (PHYSICS 202, 208, or 248), or member of Engineering Guest Students

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 241 – INTRODUCTION TO MODERN PHYSICS**

3 credits.

Kinetic theory; relativity; experimental origin of quantum theory; atomic structure and spectral lines; topics in solid state, nuclear and particle physics.

**Requisites:** (PHYSICS 202, 208, or 248) and (MATH 222 or 276). Not open to students with credit for PHYSICS 205, 244, or 249.

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 247 – A MODERN INTRODUCTION TO PHYSICS**

5 credits.

Calculus-based introduction to physics intended for Physics, AMEP, and Astronomy-Physics majors. Mechanics, waves, thermodynamics and statistical mechanics, topics in modern physics; with computation. A more mathematically rigorous and in-depth introduction to physics than the other introductory physics sequences.

**Requisites:** MATH 222 or concurrent enrollment or MATH 276 or concurrent enrollment.

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 248 – A MODERN INTRODUCTION TO PHYSICS**

5 credits.

Continuation of PHYSICS 247. Electromagnetism, circuits, optics, additional topics in modern physics; with computation.

**Requisites:** PHYSICS 247 and (MATH 234 or concurrent enrollment or MATH 376 or concurrent enrollment)

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 249 – A MODERN INTRODUCTION TO PHYSICS**

4 credits.

Continuation of PHYSICS 248. Modern physics: introduction to quantum mechanics, topics from nuclear and particle physics, condensed matter physics, and atomic physics. Three lectures and one discussion per week.

**Requisites:** PHYSICS 248

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS/MED PHYS 265 – INTRODUCTION TO MEDICAL PHYSICS**

2 credits.

A general interest survey that introduces the principles and applications of medical physics. Topics include biomechanics, energy usage and temperature regulation, pressure, sound and hearing, ultrasound, electricity in the body, optics and the eye, ionizing radiation in diagnosis and therapy, radiobiology, and nuclear medicine.

**Requisites:** PHYSICS 104, 202, 208, or 248

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 298 – DIRECTED STUDY**

1-3 credits.

Intermediate-level mentored research project in physics.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**PHYSICS 299 – DIRECTED STUDY**

1-3 credits.

Intermediate-level mentored research project in physics.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHYSICS 301 – PHYSICS TODAY**

1 credit.

A series of weekly presentations and discussions of current research topics in physics, by scientists directly involved in those studies. Provides undergraduates with access to the topics and excitement of the research frontier in a manner not possible in normal subject courses.

**Requisites:** PHYSICS 202 or concurrent enrollment, PHYSICS 208 or concurrent enrollment, or PHYSICS 248 or concurrent enrollment**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PHYSICS 307 – INTERMEDIATE LABORATORY-MECHANICS AND MODERN PHYSICS**

2 credits.

Experiments in modern physics, with discussion of statistical uncertainties and error analysis. Propagation of error. Available labs include gamma-ray spectroscopy, X-ray physics and diffraction, blackbody radiation, and Cavendish measurement of the gravitational constant G.

**Requisites:** PHYSICS 202, 208, 248 or graduate/professional standing.**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 311 – MECHANICS**

3 credits.

Origin and development of classical mechanics; mathematical techniques, especially vector analysis; conservation laws and their relation to symmetry principles; brief introduction to orbit theory and rigid-body dynamics; accelerated coordinate systems; introduction to the generalized-coordinate formalisms of Lagrange and Hamilton.

**Requisites:** (PHYSICS 202, 208, or 248) and (MATH 234, 321, or 376), or graduate/professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 321 – ELECTRIC CIRCUITS AND ELECTRONICS**

4 credits.

Direct current circuits, circuit theorems, alternating current circuits, transients, non-sinusoidal sources, Fourier analysis, characteristics of semiconductor devices, typical electronic circuits, feedback, non-linear circuits; digital and logic circuits.

**Requisites:** PHYSICS 202, 208, 248 or graduate/professional standing.**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 322 – ELECTROMAGNETIC FIELDS**

3 credits.

Electrostatic fields, capacitance, multi-pole expansion, dielectric theory; magnetostatics; electromagnetic induction; magnetic properties of matter; Maxwell's equations and electromagnetic waves; relativity and electromagnetism. Experiments for this course are covered in Physics 308.

**Requisites:** (PHYSICS 202, 208 or 248) and (MATH 234, 321 or 376), or graduate/professional standing**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PHYSICS 323 – ELECTROMAGNETIC FIELDS**

3 credits.

Special relativity, electromagnetic momentum, electromagnetic waves: propagation, interference, scattering, reflection and refraction at a dielectric interface, waves in a conductor. Wave packets and group velocity, dispersion. Waveguides and transmission lines. Retarded potentials. Radiation.

**Requisites:** PHYSICS 322 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PHYSICS 325 – OPTICS**

4 credits.

Classical and modern optics, including imaging, polarization optics, optical telescopes, optical microscopes, interference and interferometers, optical fibers and fiber-optic communication, optical resonators, lasers, optical modulators, introduction to quantum and nonlinear optics. Concepts covered in lecture reinforced by weekly laboratory experiments.

**Requisites:** (PHYSICS 202, 208, or 248) and (PHYSICS 322 or concurrent enrollment), or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 361 – MACHINE LEARNING IN PHYSICS**

3 credits.

A detailed introduction to the use of machine learning techniques in physics. Topics will include basics of probability theory and statistics, basics of function fitting and parameter inference, basics of optimization, and machine learning techniques. A selection of physics topics that are particularly amenable to analysis using machine learning will be discussed. These might include processing collider data, classifying astronomical images, solving the Ising model, parameter estimation from physics data sets, learning physical probability distributions, finding string theory compactifications, and finding symbolic physical laws.

**Requisites:** MATH 234 and (PHYSICS 104, 202, 208, or 248), or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**PHYSICS 371 – ACOUSTICS FOR MUSICIANS**

3 credits.

Intended for music students who wish to learn about physical basis of sound, sound perception, musical scales, musical instruments, and room acoustics.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 406 – SPECIAL TOPICS IN PHYSICS**

1-4 credits.

Special topics in physics at the advanced undergraduate level.

**Requisites:** PHYSICS 205, 241, 244, 249, or E C E/PHYSICS/E C E 235

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS 407 – ADVANCED LABORATORY**

2-4 credits.

Advanced experiments in classical and modern physics. Possible experiments include beta decay, muon lifetime, nuclear magnetic resonance, Stern-Gerlach atomic beam, Mossbauer scattering, velocity of light, Zeeman effect, and Compton scattering. Techniques for the statistical analysis of experimental data and keeping a proper research lab notebook are emphasized. Two (four) credit students will typically perform four (eight) experiments.

**Requisites:** PHYSICS 307

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 415 – THERMAL PHYSICS**

3 credits.

Thermodynamics, kinetic theory of gases, and statistical mechanics.

**Requisites:** (PHYSICS 205, 241, 244, 249, or E C E/PHYSICS/E C E 235) and PHYSICS 311, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**PHYSICS 448 – ATOMIC AND QUANTUM PHYSICS**

3 credits.

Review of atomic and other quantum phenomena and special relativity; introduction to quantum mechanics treating the more advanced topics of atomic physics and applications to molecular, solid state, nuclear, and elementary particle physics and quantum statistics.

**Requisites:** (PHYSICS 205, 241, 244, 249, or E C E/PHYSICS/E C E 235) and PHYSICS 311 and 322, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 449 – ATOMIC AND QUANTUM PHYSICS**

3 credits.

Continuation of PHYSICS 448. Review of atomic and other quantum phenomena and special relativity; introduction to quantum mechanics treating the more advanced topics of atomic physics and applications to molecular, solid state, nuclear, and elementary particle physics and quantum statistics.

**Requisites:** PHYSICS 448 or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS/ENVIR ST 472 – SCIENTIFIC BACKGROUND TO GLOBAL ENVIRONMENTAL PROBLEMS**

3 credits.

Designed to provide those elements of physics, atmospheric sciences, chemistry, biology and geology which are essential to a scientific understanding of global environmental problems. Specific examples of such problems include global warming, stratospheric ozone depletion, acid rain and environmental toxins.

**Requisites:** PHYSICS 103, 201, 207, 247, CHEM 103, 108, 109, 115, 116, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**PHYSICS 498 – DIRECTED STUDY**

1-3 credits.

Advanced-level mentored research project in physics.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**PHYSICS 499 – DIRECTED STUDY**

1-3 credits.

Advanced-level mentored research project in physics.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS/B M E/H ONCOL/MED PHYS 501 – RADIATION PHYSICS AND DOSIMETRY**

3 credits.

Interactions and energy deposition by ionizing radiation in matter; concepts, quantities and units in radiological physics; principles and methods of radiation dosimetry.

**Requisites:** (PHYSICS 323, 449 and MATH 320) or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS/E C E/N E 525 – INTRODUCTION TO PLASMAS**

3 credits.

Basic description of plasmas: collective phenomena and sheaths, collisional processes, single particle motions, fluid models, equilibria, waves, electromagnetic properties, instabilities, and introduction to kinetic theory and nonlinear processes. Examples from fusion, astrophysical and materials processing plasmas.

**Requisites:** (E C E 320 or PHYSICS 322), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS/E C E/N E 527 – PLASMA CONFINEMENT AND HEATING**

3 credits.

Principles of magnetic confinement and heating of plasmas for controlled thermonuclear fusion: magnetic field structures, single particle orbits, equilibrium, stability, collisions, transport, heating, modeling and diagnostics. Discussion of current leading confinement concepts: tokamaks, tandem mirrors, stellarators, reversed field pinches, etc.

**Requisites:** N E/PHYSICS/E C E/N E/PHYSICS 525, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 531 – INTRODUCTION TO QUANTUM MECHANICS**

3 credits.

Historical background and experimental basis of quantum mechanics; de Broglie waves, correspondence principle, uncertainty principle, Schrodinger equation, hydrogen atom, electron spin, Pauli principle; applications of wave mechanics.

**Requisites:** (PHYSICS 205, 241, 244, 249, or E C E/PHYSICS/E C E 235) and PHYSICS 311 and 322, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 535 – INTRODUCTION TO PARTICLE PHYSICS**

3 credits.

Review of quantum physics; introduction to particles, antiparticles and fundamental interactions; detectors and accelerators; symmetries and conservation laws; electroweak and color interactions of quarks and leptons; unification theories.

**Requisites:** PHYSICS 448 or concurrent enrollment, PHYSICS 531 or concurrent enrollment, or graduate/professional or special student standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 545 – INTRODUCTION TO ATOMIC STRUCTURE**

3 credits.

Nuclear atom; hydrogen atom; Bohr-Sommerfeld model, wave model, electron spin, description of quantum electron spin, description of quantum electrodynamic effects; external fields; many-electron atoms; central field, Pauli principle, multiplets, periodic table, x-ray spectra, vector coupling, systematics of ground states; nuclear effects in atomic spectra; interaction with coherent radiation, optical forces, laser cooling and trapping.

**Requisites:** PHYSICS 448 or concurrent enrollment, PHYSICS 531 or concurrent enrollment, or graduate/professional or special student standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS/E C E 546 – LASERS**

2-3 credits.

General principles of laser operation; laser oscillation conditions; optical resonators; methods of pumping lasers, gas discharge lasers, e-beam pumped lasers, solid state lasers, chemical lasers, and dye lasers; gain measurements with lasers; applications of lasers.

**Requisites:** (PHYSICS 322 or E C E 420) and (PHYSICS 449, 531, or 545), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**PHYSICS 551 – SOLID STATE PHYSICS**

3 credits.

Mechanical, thermal, electric, and magnetic properties of solids; band theory; semiconductors; crystal imperfections.

**Requisites:** PHYSICS 205, 241, 244, 249, 448, 531, E C E/PHYSICS/E C E 235, or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS/MED PHYS 588 – RADIATION PRODUCTION AND DETECTION**

4 credits.

Fundamental physics of ionizing radiation production and detection applied to medical science. Topics: scintillator/semiconductor detectors, ionizing radiation detectors, charged and neutral particles for external beam radiotherapy, production of radionuclides with cyclotron and linear accelerators for diagnostic and therapeutic applications, radiochemistry, and X-ray tube physics.

**Requisites:** B M E/H ONCOL/MED PHYS/PHYSICS/B M E/H ONCOL/MED PHYS 501

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 601 – SCIENTIFIC PRESENTATION**

2 credits.

Oral and written reports to give practice in the presentation of scientific papers.

**Requisites:** Senior standing and declared in an Honors program or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**PHYSICS 603 – WORKSHOP IN COLLEGE PHYSICS TEACHING**

1-2 credits.

Discussion, practice, and occasional lectures on various aspects of the teaching of physics. Course planning; course materials; lecture, demonstration, and discussion techniques; laboratory; problem solving; examinations, grading, and evaluation. Problems arising in the teaching of physics; levels of difficulty, differences in talents and backgrounds; methods of presentation of various specific topics.

**Requisites:** PHYSICS 311 and 322

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PHYSICS/B M E/MED PHYS/PHMCOL-M/RADIOL 619 – MICROSCOPY OF LIFE**

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

**Requisites:** PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 623 – ELECTRONIC AIDS TO MEASUREMENT**

4 credits.

Fundamentals of electronics, electronic elements, basic circuits; combinations of these into measuring instruments.

**Requisites:** (PHYSICS 202, 208, or 248) and (MATH 234 or 376), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 625 – APPLIED OPTICS**

4 credits.

Optical methods in research and technology. Reflection, refraction, absorption, scattering. Imaging. Sources and sensors. Schlieren methods. Interferometry. Instrumental spectroscopy. Fourier optics, image processing, holography. Laser technology, Gaussian beams, nonlinear optics.

**Requisites:** PHYSICS 322 or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Physics Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**PHYSICS 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Physics Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS 691 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS 692 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS 701 – GRADUATE INTRODUCTORY SEMINARS**

1 credit.

Designed to give new students an introduction to the broad range of modern research going on at UW Physics, and to help students find research opportunities in the department. Each week, faculty from each major research area will present their research in a seminar setting. The research areas will include selected topics both in theory and experiment from biophysics; atomic, molecular, and optical physics; plasma; condensed matter; quantum information and computation; high energy and nuclear physics; particle physics, astrophysics, and cosmology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 707 – QUANTUM COMPUTING LABORATORY**

4 credits.

Provides an intensive introduction to the experimental techniques of quantum computing. Students will do 8 experiments chosen from: Bell violation with entangled photons, Stern-Gerlach, Pulsed NMR, Optical pumping of Rb, Nanofabrication, Fiber optics communication, Diode pumped YAG laser, and Acousto-optic modulator.

**Requisites:** PHYSICS 709 and (PHYSICS 531 or 731)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PHYSICS 709 – INTRODUCTION TO QUANTUM COMPUTING**

3 credits.

A detailed introduction to quantum computation and quantum information processing. Basic topics of quantum mechanics that are most relevant to quantum computing, particularly measurement theory. Specialized topics such as entanglement, other measures of quantum correlation and the Bell inequalities. Classical and quantum information theory, classical and quantum complexity theory. Qubits, quantum gates, quantum circuits. Teleportation, quantum dense coding, quantum cryptography. Quantum algorithms: Deutsch, Simon, Shor, Grover, and adiabatic algorithms. Basic quantum error correction: 5-qubit, Steane and Shor codes. Completion of one undergraduate course in quantum mechanics recommended, such as PHYSICS 448 or 531.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 711 – THEORETICAL PHYSICS-DYNAMICS**

3 credits.

Lagrange's equations, Principle of Least Action, orbits and scattering, kinematics of rotation, rigid body dynamics, small oscillations, special relativistic dynamics, Hamiltonian formulation, canonical transformations, Hamilton-Jacobi theory, canonical perturbation theory, chaos, continuum mechanics, introduction to general relativity.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 715 – STATISTICAL MECHANICS**

3 credits.

Statistical foundations, Liouville's theorem, ensembles, classical and quantum distribution functions, entropy and temperature, connection with thermodynamics, partition functions, quantum gases, non-ideal gases, phase transitions and critical phenomena, non-equilibrium problems, Boltzmann equation and the H-theorem, transport properties, connections with quantum field theory, applications of statistical mechanics to selected problems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 716 – STATISTICAL MECHANICS II**

3 credits.

Symmetries and symmetry breaking, phase transitions, mean field theory, critical exponents, scaling hypothesis, renormalization group, diagrammatic expansion, epsilon-expansion, exact solution of the 2d Ising model. Boltzman kinetic equation, H-theorem, Fokker-Planck and Langevin equations, Born-Markov master equation, Lindblad superoperators, classical and quantum noise, theory of amplifiers.

**Requisites:** PHYSICS 715 and 731**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**PHYSICS 717 – RELATIVITY**

3 credits.

Special and general theories of relativity, relativistic electrodynamics, cosmology, unified field theories. PHYSICS 721

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**PHYSICS 721 – THEORETICAL PHYSICS-ELECTRODYNAMICS**

3 credits.

Electrostatics, magnetostatics, Green functions, boundary value problems, macroscopic media, Maxwell's equations, the stress tensor and conservation laws, electromagnetic waves, wave propagation, dispersion, waveguides, radiation, multipole expansions, diffraction and scattering, special relativity, covariance of Maxwell's equations, Lienard-Wiechert potentials, radiation by accelerated charges. PHYSICS 322 or equiv

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS/E C E/N E 724 – WAVES AND INSTABILITIES IN PLASMAS**

3 credits.

Waves in a cold plasma, wave-plasma interactions, waves in a hot plasma, Landau damping, cyclotron damping, magneto-hydrodynamic equilibria and instabilities, microinstabilities, introduction to nonlinear processes, and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**PHYSICS/E C E/N E 725 – PLASMA KINETIC THEORY AND RADIATION PROCESSES**

3 credits.

Coulomb Collisions, Boltzmann equation, Fokker-Planck methods, dynamical friction, neoclassical diffusion, collision operators radiation processes and experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS/E C E/N E 726 – PLASMA MAGNETOHYDRODYNAMICS**

3 credits.

MHD equations and validity in hot plasmas; magnetic structure and magnetic flux coordinates; equilibrium in various configurations; stability formulation, energy principle, classification of instabilities; ideal and resistive instability in various configurations, evolution of nonlinear tearing modes; force-free equilibria, helicity, MHD dynamo; experimental applications. Basic knowledge of plasmas [such as PHYSICS/E C E/N E 525] and advanced electromagnetics [such as PHYSICS 721 or E C E 740] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 731 – QUANTUM MECHANICS**

3 credits.

Schrodinger equation, operator theory, matrix mechanics, transformation theory, Heisenberg representation, orbital angular momentum, bound-state problems, scattering theory, stationary perturbation theory, degenerate systems, time-dependent perturbation theory, Born approximation, other approximation methods. PHYSICS 449 or 531, or equiv

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 732 – QUANTUM MECHANICS**

3 credits.

Interaction of electromagnetic radiation with matter, quantization of the electromagnetic field, spontaneous transitions, identical particles and spin, addition of angular momenta, tensor operators, complex atoms, Hartree approximation, molecules, Dirac equation, relativistic effects in atoms. PHYSICS 721 731

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 735 – PARTICLE PHYSICS**

3 credits.

Structure of elementary particles, quarks and gluons, introduction to calculational techniques of particle interactions (Feynman diagrams), constituent models of electroweak and strong interactions and associated phenomenological techniques. PHYSICS 535, 731 or equiv or cons inst

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 736 – EXPERIMENTAL METHODS IN NUCLEAR-, PARTICLE-, AND ASTROPHYSICS**

3 credits.

Interaction of particles with matter; detector techniques at colliding beam machines, in nuclear and particle physics, astrophysics, and cosmology; experimental strategies in detector design; principles of simulation and Monte Carlo methods, error analysis and statistical techniques in data analysis. PHYSICS 535 or cons inst

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022

**PHYSICS/E C E 746 – QUANTUM ELECTRONICS**

3 credits.

Elementary aspects of Lagrange theory of fields and field quantization; Bose, Fermi and Pauli operators; interaction of fields; quantum theory of damping and fluctuations; applications to lasers, nonlinear optics, and quantum optics. Knowledge of lasers [such as PHYSICS/E C E 546] and graduate-level electromagnetics [such as E C E 740 or PHYSICS 721] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**PHYSICS/E C E 748 – LINEAR WAVES**

3 credits.

General considerations of linear wave phenomena; one dimensional waves; two and three dimensional waves; wave equations with constant coefficients; inhomogenous media; random media. Lagrangian and Hamiltonian formulations; asymptotic methods. Knowledge of electromagnetics [such as E C E 320 or PHYSICS 321], mechanics [such as M E 340], or vibrations [such as M E 440] strongly encouraged.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS/E C E/N E 749 – COHERENT GENERATION AND PARTICLE BEAMS**

3 credits.

Fundamental theory and recent advances in coherent radiation charged particle beam sources (microwave to X-ray wavelengths) including free electron lasers, wiggler/wave-particle dynamics, Cerenkov masers, gyrotrons, coherent gain and efficiency, spontaneous emission, beam sources and quality, related accelerator concepts experimental results and applications.

**Requisites:** E C E 740**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**PHYSICS 751 – ADVANCED SOLID STATE PHYSICS**

3 credits.

Lattice dynamics; band theory; Fermi surfaces; electrodynamics of metals; optical properties; transport properties. PHYSICS 731 and 551 or equiv

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**PHYSICS 772 – HIGH ENERGY ASTROPHYSICS**

3 credits.

Interactions among the particles, fields, and radiation of interstellar and intergalactic space. Gamma-ray, x-ray, and cosmic ray production, propagation, and detection. PHYSICS 721 or 322, basic knowledge of special relativity, basic diff equations, or cons inst

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PHYSICS 779 – ADVANCED QUANTUM COMPUTING**

3 credits.

Explores applications of quantum theory to both the hardware and the software that underpin modern quantum information technology. Advanced quantum circuit theory: Clifford group and Gottesman-Knill theorem, Mathematica code. Decoherence: density matrices, probability distributions, T1 and T2. Advanced error correction: master equation, Kraus operators, fault tolerance, quantum tomography. Hardware: Trapped ions, Paul traps, sideband cooling, CZ and MS gates, neutral atoms, superconductors, quantum dots.

**Requisites:** PHYSICS 531 or 731**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 799 – INDEPENDENT STUDY**

1-3 credits.

Graduate-level mentored research project in physics.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PHYSICS 801 – SPECIAL TOPICS IN THEORETICAL PHYSICS**

1-3 credits.

Selected topics in theoretical physics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PHYSICS 805 – SPECIAL TOPICS IN PHYSICS**

1-3 credits.

Special topics in physics at the graduate level.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**PHYSICS 831 – ADVANCED QUANTUM MECHANICS**

3 credits.

Quantum theory of free and interacting fields, formal scattering theory, dispersion theory. PHYSICS 732

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PHYSICS 832 – ADVANCED QUANTUM MECHANICS**

3 credits.

Continuation of PHYSICS 831. Quantum theory of free and interacting fields, formal scattering theory, dispersion theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PHYSICS 835 – COLLIDER PHYSICS PHENOMENOLOGY**

2-3 credits.

Standard model. Application to  $e^+e^-$ , proton-antiproton, pp, and ep colliders. Jets. Weak boson, heavy-quark, and Higgs boson production and decay. Quarkonia. Neutral B meson mixing. Grand unification. Supersymmetry.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**PHYSICS/E C E 848 – NONLINEAR WAVES**

3 credits.

General considerations of nonlinear wave phenomena; nonlinear hyperbolic waves; nonlinear dispersion; nonlinear geometrical optics; Whitham's variational theory; nonlinear and parametric instabilities; solitary waves; inverse scattering method. Knowledge of electromagnetics [such as E C E 320 or PHYSICS 321] or mechanics [such as M E 340] encouraged.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PHYSICS 900 – COLLOQUIUM**

0-1 credits.

Lectures by staff and visitors. Cons inst if taken for 1 cr

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS/ASTRON 910 – SEMINAR IN ASTROPHYSICS**

0-1 credits.

Current topics in astrophysics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS/E C E/N E 922 – SEMINAR IN PLASMA PHYSICS**

0-1 credits.

Current topics in plasma physics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSICS 990 – RESEARCH**

1-12 credits.

Research supervised by individual faculty members.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PHYSIOLOGY (PHYSIOL)****PHYSIOL 699 – INDEPENDENT WORK**

1-4 credits.

Directed study projects for juniors and seniors.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**PHYSIOL 901 – SEMINAR**

1 credit.

Students, faculty, and staff present research reports of current interest.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**PHYSIOL 990 – RESEARCH**

1-9 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# PLANT PATHOLOGY (PL PATH)

## PL PATH/BOTANY 123 – PLANTS, PARASITES, AND PEOPLE

3 credits.

Explores the interaction between society and plant-associated microbes. Topics include: the Irish potato famine, pesticides in current agriculture, role of economics and consumer preference in crop disease management and the release of genetically engineered organisms.

**Requisites:** None

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PL PATH/ZOOLOGY 154 – TINY EARTH: ANTIBIOTIC DISCOVERY RESEARCH

2 credits.

Learn basic methodology in scientific research and discovery, including laboratory techniques, quantitative reasoning, scientific communication, and collaboration. Gain hands-on laboratory experience working with microbes to test original hypotheses concerning the discovery of potential antibiotic compounds while addressing the world's antibiotic resistance crisis by contributing data to the global "Tiny Earth" network of researchers to advance potential drug development. Tiny Earth seeks to encourage students to pursue careers in science through real-world, applied research experiences and aims to address a worldwide health threat of the diminishing supply of effective antibiotics by "student-sourcing antibiotic discovery." Concurrent enrollment in BIOLOGY/BOTANY/ZOOLOGY 152 is required for permission to enroll.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## PL PATH/HORT 261 – SUSTAINABLE TURFGRASS USE AND MANAGEMENT

2 credits.

Sustainable use and management of turfgrass landscapes in urban and suburban environments, including home lawns, golf courses, and sports fields. Focus is on creating sustainable and attractive turfgrass landscapes through proper species selection, use of slow-release or organic fertilizer practices, and minimizing the use of pesticides and supplemental irrigation.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PL PATH/HORT 262 – TURFGRASS MANAGEMENT LABORATORY

1 credit.

Hands-on turf establishment, cool- and warm-season grass, seed and weed identification, chemical application, and turf cultivation techniques and equipment use, plus field trips to major league sport facilities and golf courses.

**Requisites:** HORT/PL PATH/HORT 261 or concurrent enrollment

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## PL PATH 289 – HONORS INDEPENDENT STUDY

1-2 credits.

Research work for Honors students under direct guidance of a faculty member in an area of Plant Pathology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2000

## PL PATH 299 – INDEPENDENT STUDY

1-3 credits.

Research work for students under direct guidance of a faculty member in an area of Plant Pathology. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## PL PATH 300 – INTRODUCTION TO PLANT PATHOLOGY

4 credits.

Economic importance, symptoms, causes, and methods of control of representative plant diseases.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PL PATH/F&W ECOL/HORT/LAND ARC 309 – DISEASES OF TREES AND SHRUBS

3 credits.

Fundamental disease concepts, pathogens and causal agents, diagnosis, and biologically rational principles and practices for management of diseases of trees and shrubs. Includes field trips

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### PL PATH 311 – GLOBAL FOOD SECURITY

3 credits.

Isn't having enough food a basic human right? Exploration of the drivers of food insecurity: barriers to food production (pests, land availability, climate), barriers to food availability (politics, price, biofuels), and a greater need due to population growth. Examination of solutions to food insecurity.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PL PATH 315 – PLANT MICROBIOMES

4 credits.

Explore plant associated microbial communities (the plant microbiome), methods used to study them, and how we can use them to improve plant and ecosystem health in the face of challenges to agricultural and natural systems. Examples will be drawn from annual crop, grassland, and forested ecosystems. Use current molecular, bioinformatic, and statistical approaches to characterize rhizosphere microbiomes from samples collected as part of on-going research projects.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 381) and (STAT 301 or 371), or Graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PL PATH/SOIL SCI 323 – SOIL BIOLOGY

3 credits.

Nature, activities and role of organisms inhabiting soil. Effects of soil biota on ecosystem function, response to cultural practices, and impacts on environmental quality, including bioremediation of contaminated soils.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 384) and (CHEM 104, 109, or 116), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PL PATH/BOTANY 332 – FUNGI

4 credits.

Growth, development, variability and dispersal of saprophytic, parasitic, and symbiotic fungi, with a consideration of their ecological and economic significance. Develop skills in microscopy with live fungal materials.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PL PATH/BOTANY 333 – BIOLOGY OF THE FUNGI

2 credits.

Growth, development, variability and dispersal of saprophytic, parasitic, and symbiotic fungi, with a consideration of their ecological and economic significance.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PL PATH/AGRONOMY/ENTOM/HORT/SOIL SCI 354 –  
DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF  
FIELD CROPS**

1 credit.

Provides students with information necessary to diagnosis and monitor corn, soybean, alfalfa and wheat for pests (insects, weeds, diseases) and nutrient deficiency symptoms including perspectives from Agronomy, Entomology, Horticulture, Plant Pathology and Soil Science. Proper soil and pest sampling information will be provided as will proper cropstaging techniques which are essential for pest and nutrient management.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2019**PL PATH/A A E/AGRONOMY/HORT 367 – INTRODUCTION TO  
ORGANIC AGRICULTURE: PRODUCTION, MARKETS, AND POLICY**

3 credits.

Provides an in-depth understanding of the history of organic agriculture, its production, processing, marketing, and social dimensions, and its impact on environmental, community, and human health.

**Requisites:** AGROECOL/AGRONOMY/CE SOC/ENTOM/ENVIR ST/  
AGROECOL/AGRONOMY/C&E SOC/ENTOM 103 or graduate/  
professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PL PATH 375 – SPECIAL TOPICS**

1-4 credits.

Subjects of current interest to undergrads.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PL PATH 399 – COORDINATIVE INTERNSHIP/COOPERATIVE  
EDUCATION**

1-8 credits.

An internship under guidance of a faculty or instructional academic staff member in Plant Pathology and internship site supervisor. Students are responsible for arranging the work and credits with the faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Workplace – Workplace Experience Course

**Repeatable for Credit:** Yes, for 8 number of completions**Last Taught:** Spring 2020**PL PATH 400 – STUDY ABROAD IN PLANT PATHOLOGY**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None**Repeatable for Credit:** Yes, unlimited number of completions**PL PATH 499 – INDEPENDENT STUDY IN ORGANIC AGRICULTURE**

2 credits.

Provide students research and/or hands-on experiences within the organic sector in order to gain scientific knowledge and/or an in-depth understanding of the research and science of organic agriculture, its production, processing, marketing, and social dimensions, and its impact on environmental, community, and human health. Declared in the Certificate in Organic Agriculture

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PL PATH/BOTANY/ENTOM 505 – PLANT-MICROBE  
INTERACTIONS: MOLECULAR AND ECOLOGICAL ASPECTS**

3 credits.

Molecular and ecological aspects of the interactions between plants and microorganisms. Explores many of the themes, from genetic to integrative, of modern biology, and illustrates how study of plant-microbe interactions contributes to understanding of fundamental plant science.

**Requisites:** MICROBIO 303, GENETICS 466, 468, BIOCHEM 501, 508,  
or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PL PATH 517 – PLANT DISEASE RESISTANCE**

2-3 credits.

Host resistance in plant disease control. Conceptual and applied aspects of resistance: how it works, why it sometimes fails, and the traditional and modern techniques used for evaluating host resistance and incorporating resistance factors into new plant varieties.

**Requisites:** PL PATH 300, GENETICS 466, 468, HORT/AGRONOMY/  
HORT 338, 501, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PL PATH 558 – BIOLOGY OF PLANT PATHOGENS**

3 credits.

Explores biology of plant pathogenic fungi, oomycetes, nematodes, bacteria, and viruses, with emphasis on identifying: 1) key traits of each pathogen class, and 2) common strategies used by these microbes. Inquiry-driven laboratory will investigate diverse interactions between plants and their pathogens.

**Requisites:** PL PATH 300 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**PL PATH 559 – DISEASES OF ECONOMIC PLANTS**

3 credits.

Symptoms, epidemiology and control of diseases of crop plants; emphasis on disease diagnosis.

**Requisites:** (PL PATH 300 and 332), or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PL PATH/BOTANY 563 – PHYLOGENETIC ANALYSIS OF MOLECULAR DATA**

3 credits.

Theory and practice of phylogenetic inference from DNA sequence data.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PL PATH 590 – CAPSTONE IN PLANT PATHOLOGY**

1-4 credits.

Synthesizing research-based capstone experience in Plant Pathology. Develop problem-solving skills, be exposed to multidisciplinary approaches, develop teamwork and interpersonal skills, develop information resources, consider societal, economic, ethical, scientific and professional aspects of the field, and prepare and present written and/or oral reports.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PL PATH 602 – ECOLOGY, EPIDEMIOLOGY AND CONTROL OF PLANT DISEASES**

3 credits.

Environmental factors in the development and spread of diseases, pathogen variability, genetics of disease resistance, and principles of disease control.

**Requisites:** PL PATH 300, (MATH 217, 221, or 275), and (STAT 301, 371, or STAT/FW ECOL/HORT/F&W ECOL/STAT 571), or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PL PATH/ENTOM/F&W ECOL/SOIL SCI 606 – COLLOQUIUM IN ENVIRONMENTAL TOXICOLOGY**

1 credit.

Current topics in molecular and environmental toxicology and problems related to biologically active substances in the environment. Topics vary each semester. Lectures are by resident and visiting professors and other researchers.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 or BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**PL PATH 622 – PLANT-BACTERIAL INTERACTIONS**

2-3 credits.

Physiology, genetics, taxonomy, and ecology of bacterial pathogens, epiphytes, and symbionts of plants.

**Requisites:** MICROBIO 303 and (GENETICS 466, 468, BIOCHEM 501, or 508) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**PL PATH/ONCOLOGY 640 – GENERAL VIROLOGY-MULTIPLICATION OF VIRUSES**

3 credits.

Bacterial and animal viruses, their structure, multiplication, and genetics.

**Requisites:** (GENETICS 466 or 467) and (BIOCHEM 501 or 508) or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PL PATH/BOTANY/GENETICS/M M & I 655 – BIOLOGY AND GENETICS OF FUNGI**

3 credits.

Fungal genetics, genomics, and physiology using plant pathogenic fungi and the genetic models *Aspergillus nidulans* and *Neurospora crassa* as model systems to explore the current knowledge of fungal genetics and plant/fungal interactions.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PL PATH 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for undergraduate students in an Honors program completing a thesis in the area of Plant Pathology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Fall 2018**PL PATH 682 – SENIOR HONORS THESIS**

2-4 credits.

Second semester of individual study for undergraduate students in an Honors program completing a thesis in the area of Plant Pathology, as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Honors - Honors Only Courses (H)**Repeatable for Credit:** No**Last Taught:** Spring 2019**PL PATH 699 – SPECIAL PROBLEMS**

1-5 credits.

Individual advanced work in an area of Plant Pathology under the direct guidance of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PL PATH 799 – PRACTICUM IN PLANT PATHOLOGY TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PL PATH 800 – INQUIRY-BASED BIOLOGY TEACHING**

1-2 credits.

Develop competence and confidence as teachers. Cover fundamentals of learning theory and practical strategies for teaching biology. Practice lecturing, manage classroom dynamics, and teach laboratory sections (optional).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**PL PATH 801 – TEACHING BIOLOGY: SPECIAL TOPICS**

1 credit.

Learn about mentoring and/or instructional materials. Practice mentoring undergraduate researchers with feedback and evaluation and/or develop and evaluate instructional materials.

**Requisites:** PL PATH 800 or concurrent enrollment**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**PL PATH 875 – SPECIAL TOPICS**

1-4 credits.

Topics of current interest to Grad students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**PL PATH 923 – SEMINAR**

1 credit.

Seminar series on topics related to plant pathology

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PL PATH/BOTANY 930 – SEMINAR-MYCOLOGY**

1 credit.

Topics, recent advances literature in the area of Mycology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**PL PATH 990 – RESEARCH**

1-9 credits.

Independent laboratory research in preparation of a graduate thesis under supervision of a faculty member

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## POLITICAL SCIENCE (POLI SCI)

**POLI SCI 100 – FRESHMAN TOPICS SEMINAR**

3 credits.

An umbrella course to be used to offer a variety of special topics seminars for freshmen. See footnote for Topic Title.

**Requisites:** First year students or first year transfer students only

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**POLI SCI 104 – INTRODUCTION TO AMERICAN POLITICS AND GOVERNMENT**

3-4 credits.

Basic institutions and processes of American government. The role of constitutional structures, parties, interest groups and elections in the system; policy formation and policy content.

**Requisites:** Not open to students who have taken POLI SCI 184 or POLI SCI 404

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 120 – INTRODUCTION TO COMPARATIVE POLITICS**

4 credits.

Introduction to Comparative Politics, one of the four sub-fields in Political Science, which involves the comparative analysis of political institutions, processes, and outcomes at the national level. Examines how to usefully compare politics in a variety of countries and makes comparisons explicit and systematic in order to determine how governments work, how power is organized and contested at the national level, and how regular people can participate and pursue their interests in different political settings. Includes key concepts, theories, methods, issues, and language.

**Requisites:** Not open to students with credit for POLI SCI 182 (or POLI SCI 186 prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 140 – INTRODUCTION TO INTERNATIONAL RELATIONS**

3-4 credits.

Covers the major issues in international relations since the end of World War II including: the causes of war; civil wars and ethnic conflict; economic development; international trade; exchange rates and international monetary relations; international capital flows and financial crises; foreign direct investment; globalization and the environment; the UN, the IMF, World Bank, WTO, and other international organizations; and international law and human rights. The focus is on states' relations with each other and the factors determining the nature and outcomes of these international interactions. The course seeks to develop analytical tools for thinking about important questions in world politics regardless of the countries or issues involved, to examine international affairs in a systematic way. Students who have taken POLI SCI 103 prior to Fall 2017 may not enroll in this course.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 160 – INTRODUCTION TO POLITICAL THEORY**

3-4 credits.

Exploration of core problems of political life, such as the nature and limits of obligation, the concept of justice and its political implications, and the relationship between equality and liberty, through a selection of ancient and modern sources. Not open to students with credit for POLI SCI 209 prior to fall 2017

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 170 – RESEARCH METHODS IN POLITICAL SCIENCE**

3-4 credits.

Introduction to political science as a discipline that focuses on the development of research questions, research designs, and the quantitative and qualitative tools commonly used to implement research designs.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 182 – INTRODUCTION TO COMPARATIVE POLITICS (HONORS)**

3 credits.

Introduction to Comparative Politics, one of the four sub-fields in Political Science, which involves the comparative analysis of political institutions, processes, and outcomes at the national level. Examines how to usefully compare politics in a variety of countries and makes comparisons explicit and systematic in order to determine how governments work, how power is organized and contested at the national level, and how people can participate and pursue their interests in different political settings. Includes key concepts, theories, methods, and country case studies.

**Requisites:** Declared in an Honors program. Not open to students with credit for POLI SCI 120

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 184 – INTRODUCTION TO AMERICAN POLITICS**

3 credits.

Basic institutions and processes of American government. The role of constitutional structures, parties, interest groups and elections in the system; policy formation and policy comment.

**Requisites:** Declared in an Honors program. Not open to students with credit for POLI SCI 104

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**POLI SCI 199 – DIRECTED STUDY**

2 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member; students should have completed at least one course in POLI SCI.

**Requisites:** Consent of instructor

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**POLI SCI 201 – SPECIAL TOPICS IN POLITICAL SCIENCE**

3 credits.

An experimental topics course that introduces students to compelling recent events and to the current research of political scientists. This course can be repeated by students, but not with the same content.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**POLI SCI 202 – PREPARATION FOR THE WISCONSIN IN WASHINGTON PROGRAM**

1 credit.

This course will prepare students to participate in the Wisconsin in Washington Internship Semester. The course focuses on internship searches, applications, and decisions on where to work. The course also sets academic, professional and personal goals for the upcoming term in DC. Students will also identify a tentative public policy topic that they will initiate this term and research and complete during the semester in DC. The course will spend time on reviewing general and DC-specific standards of professional conduct. Successful completion of this course is required for final admission to the Wisconsin in Washington Program.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**POLI SCI 205 – INTRODUCTION TO STATE GOVERNMENT**

3-4 credits.

Basic institutions and processes of state government in the United States; the role of parties, pressure groups, and elections in the system; the policy process, its outputs and outcomes; the role of states in the federal system, and the diversity of state politics and policy.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POLI SCI 206 – INTRODUCTION TO POLITICAL PSYCHOLOGY**

3-4 credits.

Examines the psychological aspects of the political behavior of individuals--whether elites, activists or members of general publics--and their consequent political behaviors in various groups and institutional contexts. Not open to students with credit for POLI SCI 267 prior to fall 2017

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**POLI SCI/LEGAL ST 217 – LAW, POLITICS AND SOCIETY**

3-4 credits.

Introduction to the legal process. Examination of the various concepts of law, the perennial problems of the law, legal reasoning, and the nature and function of law and the courts.

**Requisites:** Freshman or sophomore standing only

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/CHICLA 231 – POLITICS IN MULTI-CULTURAL SOCIETIES**

3-4 credits.

Race, ethnicity, and religion as political factors; cultural pluralism, politics, and policy in the United States and selected other multi-cultural politics.

**Requisites:** Freshman or sophomore standing only

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI/ASIAN/GEOG/HISTORY/SOC 244 – INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES**

4 credits.

As an introduction to Southeast Asia, covers the ethnic, cultural, religious, and political histories of the region from the classical states period to the present, with an emphasis on colonialism, nationalism, decolonization, and the emergence of modern political and social systems into the 21st century, including an exposure to region's contemporary literature. Not open to students who completed LCA 244 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI/GEOG/HISTORY/SLAVIC 253 – RUSSIA: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of Russian civilization from its beginnings through the present day.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/GEOG/HISTORY/SLAVIC 254 – EASTERN EUROPE: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of East European culture, society, politics, and literature from its beginnings to the present day.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POLI SCI/ASIAN/HISTORY 255 – INTRODUCTION TO EAST ASIAN CIVILIZATIONS**

3-4 credits.

Multidisciplinary and historical perspectives on the East Asian civilizations of China, Japan, Korea, Tibet and Mongolia from prehistory to the present, including developments in philosophy, economy, governance, social structure, kinship, geography, etc.

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/C&E SOC/HISTORY/SOC 259 – FORWARD? THE WISCONSIN IDEA, PAST AND PRESENT**

1-3 credits.

Engage in ongoing reflection and dialogue on the Wisconsin Idea and how it informs the mission of the University of Wisconsin. Consider the Wisconsin Idea as it has developed since its beginnings, with a focus on what it means today and what it can mean in the future.

**Requisites:** Junior or senior standing only

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**POLI SCI/AFROAMER/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/SOC/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 265 – DEVELOPMENT OF ANCIENT AND MEDIEVAL WESTERN POLITICAL THOUGHT**

3-4 credits.

Exploration of core problems in classical and European thought, such as the character of the best regime, the role of politics in the good life, and the relationship between virtue and happiness, through a selection of ancient sources. Not open to students with credit for POLI SCI 501 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to Fall 2017)

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**POLI SCI/CHICLA/HISTORY/LACIS 268 – THE U.S. & LATIN AMERICA FROM THE COLONIAL ERA TO THE PRESENT: A CRITICAL SURVEY**

3 credits.

A critical examination of US-Latin American relations from the colonial era to the present, tracing the emergence and evolution of the United States as a hemispheric and global power and its political and economic impact on Latin America. Primary attention will be focused on US relations with Mexico, Central America and the Caribbean, but other Latin American countries will figure prominently during certain episodes.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**POLI SCI 270 – UNDERSTANDING POLITICAL NUMBERS**

3–4 credits.

How numbers and statistics are used in electoral strategies, political debates and legal proceedings. Presents basic tools of analysis and how to use them. Not open to students with credit for POLI SCI 218 prior to fall 2017

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed – Quantitative Reasoning Part B Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 272 – INTRODUCTION TO PUBLIC POLICY**

3–4 credits.

Major issues of public policy in such fields as economic management, welfare, education, health, energy and the environment. How public problems develop, approaches to policy-making, why programs succeed and fail. Not open to students with credit for POLI SCI 219 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 274 – POLITICAL CHOICE AND STRATEGY**

3–4 credits.

An introduction to decision analysis, strategic interaction, and voting systems and their manipulation. Examines a wide range of institutions for making social choices and the opportunities for the exercise of political strategy.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed – Quantitative Reasoning Part B Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI/AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/SOC 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI/AFRICAN/AFROAMER/HISTORY 297 – AFRICAN AND AFRICAN-AMERICAN LINKAGES: AN INTRODUCTION**

4 credits.

Analysis of retention of African elements in African-American oral, written, and material culture. Social, cultural, and political issues regarding race, self-definition, and self-determination in both Africa and North America will be examined.

**Requisites:** None**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**POLI SCI/CHICLA 302 – MEXICAN-AMERICAN POLITICS**

3–4 credits.

This class examines the major problems and issues in Mexican-American politics since World War II. An emphasis will be placed on the ways in which race, class and culture have structured politics for the Mexican origin people. Not open to students with credit for POLI SCI 464 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 304 – THE POLITICAL ECONOMY OF RACE IN THE UNITED STATES**

3–4 credits.

Race in relation to American economic development. Problems of racial minorities in the American political and economic system. Not open to students with credit for POLI SCI 462 prior to fall 2017

**Requisites:** POLI SCI 104, POLI SCI 184, POLI SCI/LEGAL ST/ POLI SCI 217, CHICLA 201, or AFROAMER 151**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**POLI SCI 305 – ELECTIONS AND VOTING BEHAVIOR**

3-4 credits.

Psychological and social components of voting behavior, current electoral trends, role of voters in the governing process. Not open to students with credit for POLI SCI 467 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 306 – AMERICAN POLITICAL PARTIES**

3-4 credits.

Examination of the electoral, organizational, and governmental roles of political parties at the national and state levels in the U.S. Emphasis on changes in response to historical and contemporary circumstances.

**Requisites:** POLI SCI 104 or 184**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**POLI SCI 311 – UNITED STATES CONGRESS**

3-4 credits.

Principles, procedures and problems of the legislative process of the United States Congress. Not open to students with credit for POLI SCI 426

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 314 – CRIMINAL LAW AND JUSTICE**

3-4 credits.

Substantive and procedural aspects of criminal law, including the purposes of criminal justice, specific crimes, criminal responsibility and punishment, legal concepts of proof, and 4th, 5th, and 6th Amendment issues. The case approach is used. Not open to students with credit for POLI SCI 452 prior to fall 2017

**Requisites:** Sophomore standing and a course in POLI SCI or SOC**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**POLI SCI 315 – LEGISLATIVE INTERNSHIP**

3 credits.

Practical experience in a legislative office. Policy research. Readings in legislative process.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 316 – CAREERS IN POLITICAL SCIENCE**

1 credit.

Facilitates transitions from undergraduate academic learning related to Political Science to meaningful and rewarding professional opportunities including jobs, paid internships, graduate study, and post-graduate fellowships. Building on core coursework in Political Science and related disciplines, addresses how to utilize existing academic learning and completed readings and assignments, extra-curricular activities, student research, for-pay work, internships, and interaction with alumni and other personal networks to further develop career options. Also provides practical ways to explore and pursue a wide range of career pathways related to Political Science. Develop essential professional development materials and self-promotional skills.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 320 – GOVERNMENTS AND POLITICS OF THE MIDDLE EAST AND NORTH AFRICA**

3-4 credits.

An introduction to the most pertinent themes to the study of politics and governance in the Middle East. Main topics to be covered: political economy of the region; link between Islam, culture and democracy; the politics of authoritarianism; and political Islam.

**Requisites:** Sophomore standing, POLI SCI 104 or 140**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 321 – LATIN-AMERICAN POLITICS**

3-4 credits.

Contemporary political problems in Latin America; emphasis on political economy, political instability, social movements, and democratization. Not open to students with credit for POLI SCI 630 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014

**POLI SCI 322 – POLITICS OF SOUTHEAST ASIA**

3–4 credits.

Comparative analysis of such issues as state formation, state–society relations, the politics of economic development, tensions between authoritarianism and democracy, and the politics of identity, with particular attention to a select number of major countries of Southeast Asia. Not open to students with credit for POLI SCI 639 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**POLI SCI 323 – ISLAM AND WORLD POLITICS**

3–4 credits.

Examines the multifaceted nature of political Islam in the contemporary world. Starting with the basic tenants of Islam, and key concepts and theoretical understandings of the relationships between Islam and politics, the course builds on the approaches developed in the first part of the course examining how Islam has influenced politics differently in various parts of the world including the Middle East, Southeast Asia, and South Asia. Students will familiarize themselves with theoretical debates about the roles of Islam in politics; analyze the impact of Islam on politics in the contemporary world; and gain empirical knowledge about how Islam functions differently in various countries.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**POLI SCI 324 – CHINESE POLITICS**

3–4 credits.

Examine three questions about Chinese politics through a comparative perspective. First, what functions do formal institutions such as the political party, legislature, courts, and bureaucracy serve in an authoritarian regime? Second, what are the political forces that lay a good foundation for China to successfully transition from a planning economy to a robust market economy and sustain high-speed growth for more than four decades? Finally, how does the Chinese government deal with pressing social problems and threats to its authoritarian leadership in this new era?

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/INTL ST 325 – SOCIAL MOVEMENTS AND REVOLUTIONS IN LATIN AMERICA**

3–4 credits.

An introduction to the major empirical and theoretical themes in the study of social movements and politics in Latin America. While it is impossible to cover every theoretical approach or Latin American case during the semester, the course should give students the tools to begin to think critically about where and why people engage in collective action. We will develop and hone these tools through thinking about Latin American cases, paying specific attention to revolutions, social movements, and riots. The course is designed in three parts. It begins by exposing students to the dominant theoretical paradigms in the study of contentious politics as well as some prominent critiques. The course then turns to empirical themes in Latin American revolutions, challenging students to use and question the theoretical tools to which they have already been exposed. The final part of the course looks to social movements in Latin America. Cases will focus on challenges to dictatorships, identity-based movements, and resistance to globalization.

**Requisites:** Sophomore standing and (POLI SCI 120, 140 or INTL ST 101) or (POLI SCI 103 or 106 taken prior to Fall 2017)

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI/INTL ST 327 – INDIAN POLITICS IN COMPARATIVE PERSPECTIVE**

3 credits.

This course explores the socio-economic and political outcomes across India. This course will employ the major theories of comparative politics that explain political outcomes such as regime type, economic development and conflict. This course explores why some countries are democracies, while others are dictatorships; why some countries are poor, while others are rich; and why some countries experience high levels of violence, while others are peaceful. The course considers how India comports with standard theories in comparative politics and how standard theories might be revised in light of the Indian case. The course maps variation on the sub-national and regional level. The course will ultimately consider reforms proposed by the Indian state to further democratic and economic development and to reduce conflict. Students will learn about India's politics in a structured manner, and will gain an appreciation of the power and limitations of the political science method.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017



**POLI SCI 328 – POLITICS OF EAST AND SOUTHEAST ASIA**

3-4 credits.

Asia is a vibrant region politically and economically, and is very important to the United States for international security and economic stability. Given its importance, this course provides broad and essential knowledge about Asian nations with a particular focus on China, South Korea, North Korea, Indonesia, Thailand, and the Philippines. Country studies are intended to introduce major issues in comparative politics such as democratization, elections, economic development, security, religion and politics. This course will enable students to (1) gain an empirical and analytical understanding of the political dynamics of the region; (2) think comparatively within the regime and across the developing world more generally; and (3) address and debate theoretical questions in political science through Asian politics materials.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**POLI SCI 329 – AFRICAN POLITICS**

3-4 credits.

Process of rapid political change in contemporary Africa with special emphasis on the emergence of new states. Not open to students with credit for POLI SCI 660 prior to fall 2017

**Requisites:** Sophomore standing and POLI SCI 120, 182, or POLI SCI/AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/POLI SCI 277 (or POLI SCI 106 or 186 taken prior to Fall 2017)

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 330 – POLITICAL ECONOMY OF DEVELOPMENT**

3-4 credits.

An introduction to the political economy of development. Why are some countries more economically developed than others? To help answer this question, examine leading theories of economic development. In light of these theories, then examine the development experiences of three major regions of the world. Consider a series of issues about development, including the effect of ethnic diversity, corruption, natural resources, and women's empowerment on economic development. Conclude with an examination of the effects of international interactions-via trade, foreign aid, migration, and war-on economic development.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**POLI SCI 332 – GERMAN POLITICS**

3-4 credits.

A broad overview of politics in Germany, Europe's politically and economically most powerful country. Several broad themes are covered: political institutions, electoral system and elections, parties and party system, interest representation, political participation, political economy, the legacies of Germany's past, social policy, European and foreign policy, and current and future challenges. Learn to relate the German experience to broader issues, problems, and concepts used in the comparative study of domestic politics.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**POLI SCI 334 – RUSSIAN POLITICS**

3-4 credits.

Theory and practice of Russian States, emphasis on politics, economic and institutional developments since 1991. Not open to students with credit for POLI SCI 633 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 335 – SOCIAL IDENTITIES**

3 credits.

An introduction to theories and empirical work on social identities, focusing in particular on definitions and measurement. It has three main goals: First, examine various definitions of social identities and different types of identities (ethnicity, race, nationality, gender, class, and religion). Second, look at techniques and strategies that have been developed to measure identities (content and discourse analysis, surveys, interviews and ethnography, censuses). Third, examine empirical works on identities from a variety of geographical areas and methodological perspectives.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020

**POLI SCI 336 – DEMOCRACY (AND ITS UNCERTAIN FUTURE)**

4 credits.

Democracy has come under stress, both at home and across the world. The global decline of democracy has accelerated over the past decade, and levels of democracy enjoyed by the average global citizen today are down to levels last found around 1990. The promise of democracy's inevitable ascent and dominance after the end of the Cold War has proven shortlived. Examines the state and future of a political system we tend to take for granted but should not. Starts with a brief overview of the evolution of the concept of democracy over time. Examines the relationship between democracy and economic development, culture, identity, and religion. Considers and compares core democratic institutions. Investigates current challenges to democracy and democratization and offers an overview of the state of democracy across different world regions.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**POLI SCI 338 – THE CIVIL-MILITARY PARADOX IN U.S. POLITICS AND SOCIETY**

3 credits.

Protecting a democratic nation from foreign threats often requires that nation to create a powerful military. Yet the creation of a powerful military may undermine the democracy that it is designed to protect. How do, and how should, democracies manage the paradoxical relationship between civilian authority and military institutions. Explores civilian and military perspectives in U.S. civil-military relations; address issues such as the use of military advice by civilian leaders, military challenges to civil authority, and tensions generated by shared responsibility for national security between the executive, legislative, and judicial branches. Studies how civil-military relations impact wider American society by examining the garrison state hypothesis; debates centered upon the draft versus an all-volunteer force; issues of equity and inclusion; and current concerns regarding a civil-military "gap."

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 339 – NON-DEMOCRACIES**

3 credits.

Studies the varieties and characteristics of non-democratic regimes from around the world: how they form, why they endure, and when they collapse, engaging along the way with theories of electoral behavior, political psychology, political violence, popular mobilization, and democratization.

**Requisites:** POLI SCI 120 or 182**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**POLI SCI 340 – THE EUROPEAN UNION: POLITICS AND POLITICAL ECONOMY**

3-4 credits.

Introduction to the politics, political economy, history, and theory of European integration. Topics include the workings of EU institutions and law, the effect of the EU on national politics and economies, economic politics and policy-making in the EU, the EU as an actor in the world economy.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI/JEWISH 341 – ISRAELI POLITICS AND SOCIETY**

3-4 credits.

Examines the issues currently facing Israeli society and the ongoing debates in Israeli politics. Provides historical background and analytical understanding of contemporary Israeli politics. Attention will be paid to political history, institutions, economic development, coalition formation, ethnic politics, and religious-secular divisions as they are manifested in Israeli politics.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**POLI SCI 343 – THEORIES OF INTERNATIONAL SECURITY**

3-4 credits.

Role of alliances in contemporary and historical international political systems. Purpose of alliance formation; reasons for their dissolution; relationship of alliance activity with international war and with political integration. Role of alliances in future international systems. Not open to students with credit for POLI SCI 367 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to Fall 2017)**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**POLI SCI 345 – CONFLICT RESOLUTION**

3-4 credits.

Every war comes to an end, but some end sooner than others. This course analyzes why and how conflicts come to an end, discussion relevant theories of conflict and conflict resolution, and important cases. Not open to students with credit for POLI SCI 378 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POLI SCI 346 – CHINA IN WORLD POLITICS**

3-4 credits.

Chinese foreign policy as seen from Beijing--the need for national security, the desire for revolution; and the impact of China on the rest of the world.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**POLI SCI 347 – TERRORISM**

3 credits.

Examines the causes of terrorism, goals and strategies pursued by terrorist groups, the consequences of terrorism, and counterterrorism policies adopted by governments. Not open to students with credit for POLI SCI 319 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 120, 140, 182, 184, INTL ST 101 or POLI SCI/LEGAL ST/POLI SCI 217) or (POLI SCI 103, 106, or 186 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**POLI SCI 348 – ANALYSIS OF INTERNATIONAL RELATIONS**

3-4 credits.

Focuses on how to analyze problems in international politics by the use of game theory. Examples include governments making choices about the size of their military forces, barriers to trade, or international agreements on environmental issues. Analysts study strategic interaction using both informal and mathematical methods. Provides a good introduction to the basics of game theory -- a tool useful in many different settings -- as well as an introduction to the study of world politics. From the perspective of quantitative reasoning, one of the most important set of lessons center on the logic of strategic interaction and the notion of equilibrium. Along with basic game theory students will also be introduced to the pragmatic use of mathematical tools including algebra, set theory, functions, and probability theory. Not open to students with credit for POLI SCI 376 prior to fall 2017

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to Fall 2017)

**Course Designation:** Gen Ed – Quantitative Reasoning Part B

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 349 – GLOBAL ACCESS TO JUSTICE**

3 credits.

Lawyers are present in all countries, but their roles vary tremendously. In some countries, lawyers are greatly respected and are seen as making an important contribution by representing their clients and participating in the political process. In other countries, lawyers are viewed as less essential, perhaps even as a nuisance. Study lawyers in many different countries in an effort to explain the variation in their status and the consequent impact on citizens' access to justice.

**Requisites:** POLI SCI 120, 140, or sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI 350 – INTERNATIONAL POLITICAL ECONOMY**

3-4 credits.

Analyzes the interaction of politics and economics in the international arena, both historically and in the contemporary era of globalization. Focuses on international trade, monetary, and financial relations in both developed and developing economies. Not open to students with credit for POLI SCI 371 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 354 – INTERNATIONAL INSTITUTIONS AND WORLD ORDER**

3-4 credits.

The study of international cooperation and the analysis of regional, functional, and universal regimes and institutions. Not open to students with credit for POLI SCI 337 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**POLI SCI/CHICLA/HISTORY/LACIS 355 – LABOR IN THE AMERICAS: US & MEXICO IN COMPARATIVE & HISTORICAL PERSPECTIVE**

3 credits.

Provides a critical examination of the history of labor and working people in the Americas, from the colonial era to the present. It focuses on the experience of the United States and Mexico, offering a comparative perspective on their distinct but also shared (and increasingly linked) histories. The seminar proceeds chronologically, highlighting major episodes in the evolution of labor systems in the two countries, beginning with the colonial labor systems implemented by the Spanish and British empires following the European conquest of the Western Hemisphere. Among other topics, we will examine the pivotal role of slavery and other forms of forced labor, the impact of the industrial revolution, the emergence and expansion of corporate capitalism and the labor unrest it provoked in the post-civil war U.S., the role of labor in the Mexican Revolution and its aftermath, the impact of the Great Depression and labor incorporation on the post-WWII social and political order of both countries, the breakdown of that order and the move to neo-liberalism in the 1970s and 1980s, and the emergence of an increasingly integrated North American production system and its consequences for labor and working people on both sides of the US-Mexico border.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**POLI SCI 356 – PRINCIPLES OF INTERNATIONAL LAW**

3-4 credits.

A survey course that focuses on interactions among the primary entities in the international system; namely, states, inter- governmental and non-governmental organizations, and other international actors governed by international law. The study of international relations and international law is absolutely critical to understanding contemporary politics, both domestic and foreign. This course addresses both structural and substantive issues related to international law. In other words, it should provide basic tools for understanding the way in which international law works, as well as introduce substantive issues of interest to students of world politics. The course will place special emphasis on the role of international organizations in the international legal system, and special attention will be paid to the European Union as an international actor within this system of law. Not open to students with credit for POLI SCI 316 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 359 – AMERICAN FOREIGN POLICY**

3-4 credits.

This course undertakes a historical and analytical approach to U.S. foreign policy since World War II. The course is divided into three main topics: U.S. Foreign Policy since World War II and the evolution of U.S. policy and the impetus behind important foreign policy choices; The people and institutions and processes that guide foreign policy formation and implementation; And the more salient foreign policy challenges facing the U.S. in the 21st century including how the US has responded to the attacks of September 11, 2001, the effectiveness of foreign aid policy.

**Requisites:** Sophomore standing and (POLI SCI 104, 140, 184 or INTL ST 101) or (POLI SCI 103 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 360 – HISTORY OF AMERICAN POLITICAL THOUGHT**

3-4 credits.

The intellectual origins and evolution of American political thought as seen through the lens of leading politicians, novelists and social critics from the Puritans to the Civil War; consideration of the central tensions of American political thought from a contemporary perspective. Not open to students with credit for POLI SCI 565 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **POLI SCI 361 – CONTEMPORARY AMERICAN POLITICAL THOUGHT**

3-4 credits.

This course considers central themes and controversies in American political thinking during the 20th and early 21st centuries. Topics include the development of liberalism from the Progressive Era to the New Deal to the Great Society and beyond; the emergence of new strands of conservatism after World War II and the tensions between those strands; challenges by excluded and marginalized groups to the traditional social and political order; and the revival of concerns about "community" in America. As a topic of study, "American Political Thought" combines philosophy, political theory, history, and practical politics. The course covers a wide variety of texts, ranging from philosophical treatises to newspaper articles, from presidential addresses to works of social science with ultimate goal to become more knowledgeable and more critical students of the American political experience. Not open to students with credit for POLI SCI 566 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to Fall 2017)

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **POLI SCI/CLASSICS/HISTORY 362 – ATHENIAN DEMOCRACY**

3 credits.

Explores key issues in the ideology and practice of Athenian democracy. Examines democratic values, institutions, rhetoric, and sociology in order to provide the basic tools to understand democracy in its ancient context. Engages with a variety of source material (literary, archaeological, epigraphic) in order to develop multiple skills of interpretation. Some questions examined include: What are the key features of Athenian democracy, how did it change over time, and how did it differ from modern democracy? How did the Athenians justify and critique this political system? How did they reconcile citizen egalitarianism with social inequalities of wealth, gender, and status? To what extent were women, foreigners, slaves, or the poor included or excluded from politics? Was Athenian democracy a robust political system or a system in crisis?

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **POLI SCI 363 – LITERATURE AND POLITICS**

3-4 credits.

Interactions between literature and politics, and the role of literature more generally in the functioning of the political systems. Not open to students with credit for POLI SCI 570 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POLI SCI 364 – CHRISTIAN POLITICAL THOUGHT**

3-4 credits.

Exploration of key themes, developments, and figures in Christian political and ethical traditions.

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to Fall 2017)

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **POLI SCI/ILS/ITALIAN/LITTRANS 365 – MACHIAVELLI AND HIS WORLD**

3 credits.

Introduces students to the major works of Machiavelli through the close reading of his writings in cultural and historical contexts. Discussion and targeted writing assignments will aim at cultivating in students 1) a broad understanding of Machiavelli's principal intellectual attitudes, 2) a deeper understanding of his literary sensibility, and 3) the ability to articulate controversies and complexities surrounding his thought.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POLI SCI/HISTORY 370 – ISLAM AND POLITICS**

3-4 credits.

In the early twentieth century, a series of movements arose in the Middle East and South Asia, calling Muslims to return to Islam. Today, leaders and members of such groups -now known as Islamists -insist that one cannot live a fully Islamic life in the absence of an Islamic state. How and why did these movements come to focus on building an Islamic state? How do they pursue this goal?

**Requisites:** Sophomore standing or 3 Credits in HISTORY or POLI SCI

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POLI SCI/JOURN/URB R PL 373 – INTRODUCTION TO SURVEY RESEARCH**

3 credits.

Theory and practice of survey research; planning, sampling, questionnaire construction, interviewing, content analysis, machine tabulation, analysis of data; two hours lecture; two hours lab or field work. Not open to students with credit for POLI SCI 544 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**POLI SCI 377 – NUCLEAR WEAPONS AND WORLD POLITICS**

3-4 credits.

Covers the origins of nuclear weapons, the reasons states seek them, the strategies developed for their use, the consequences of their development, and efforts to control and reverse their spread.

**Requisites:** Sophomore standing and (POLI SCI 140 or INTL ST 101) or (POLI SCI 103 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POLI SCI 390 – STUDY ABROAD TOPICS IN POLITICAL SCIENCE: INTERNATIONAL RELATIONS**

1-4 credits.

An umbrella course for variable credit international relations courses taken on study abroad programs.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 400 – TOPICS IN POLITICAL SCIENCE**

1-4 credits.

An umbrella course for variable credit topic courses, such as summer forum, intensive summer courses, half-semester courses, etc.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 401 – SELECTED TOPICS IN POLITICAL SCIENCE**

3-4 credits.

A topics course for the exploration of current issues in Political Science.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 402 – WISCONSIN IN WASHINGTON INTERNSHIP COURSE**

4 credits.

This course offers the opportunity to apply many things learned in the classroom to the professional world and to apply things learned in the professional world to a student's liberal arts education. Interning will introduce students to the professional world of political organizations giving them the chance to enhance professional skills, build a network of contacts, and explore possible career choices. This class stresses active reflection, self-assessment, and the honing of critical thinking and writing. The internship course builds structure with written assignments, activities, reflections, and readings to help students to make the most of their internships. Analytical work in this course will allow students to systematically analyze the workplace in ways that help them recognize prevailing office dynamics, adapt to accepted organizational standards, and to identify opportunities to be a more effective colleague. The course will ask students to analyze their current experiences and to relate them to their past learning and future possibilities.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**POLI SCI 405 – STATE GOVERNMENT AND PUBLIC POLICY**

3-4 credits.

The structure of state government and the politics of public policy-making in the fifty states.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 408 – THE AMERICAN PRESIDENCY**

3-4 credits.

The President as chief administrative leader, political leader, foreign policy initiator, commander-in-chief, and head of state.

**Requisites:** Sophomore standing and (POLI SCI 104 or 184)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**POLI SCI 410 – CITIZENSHIP, DEMOCRACY, AND DIFFERENCE**

4 credits.

A service-learning course designed to foster enhanced understanding of citizenship and civic engagement. Basic democratic theory, empirical research on political participation, functions and regulation of nonprofit organization. Not open to students with credit for POLI SCI 425 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**POLI SCI 411 – THE AMERICAN CONSTITUTION : POWERS AND STRUCTURES OF GOVERNMENT**

4 credits.

This course undertakes an historical examination of the development of American constitutional thinking about powers and structures of government from the founding era to the present day. Issue that are considered include separation of powers, executive war powers, the powers of Congress, judicial review and the role of courts, and federalism. The course focuses on the development of constitutional law, constitutional politics, and American political development.

**Requisites:** Sophomore standing and (POLI SCI 104 or 184)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 412 – THE AMERICAN CONSTITUTION: RIGHTS AND CIVIL LIBERTIES**

4 credits.

This course undertakes an historical examination of the development of American constitutional thinking about individual rights and civil liberties from the founding era to the present day. Issue that are considered include freedoms guaranteed by the original Articles, the Bill of Rights, and the Civil War Amendments (XIII, XIV, and XV) as these issues appear in constitutional law, constitutional politics, and social and economic developments. The role of the federal courts, the nature and operation of principles of federalism, and the authority of Congress to protect constitutionally guaranteed rights are also major topics of consideration.

**Requisites:** Sophomore standing and (POLI SCI 104 or 184)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 414 – THE SUPREME COURT AS A POLITICAL INSTITUTION**

3 credits.

This course uses a social science approach to analyze theories of judicial decision making and to learn how law is made in a political context. Students will understand how the Supreme Court and justices operate in an interdependent political environment.

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 416 – COMMUNITY POWER AND GRASS ROOTS POLITICS**

3 credits.

Introduces students involved in volunteer or community activism in the Madison area to the literature on political power and community organizing. Conduct field research and write an analysis of activities.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 417 – THE AMERICAN JUDICIAL SYSTEM**

3-4 credits.

Structure, process, and personnel of American courts; emphasis on the governmental and political consequences of court decisions for public policy-making.

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**POLI SCI/PUB AFFR 419 – ADMINISTRATIVE LAW**

3-4 credits.

Delegation of powers, elements of fair administrative procedure, judicial control over administrative determination. Not open to students with credit for POLI SCI 420 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 421 – THE CHALLENGE OF DEMOCRATIZATION**

3-4 credits.

Focusing on political philosophy and/or comparative institutions, cultures, economic systems and behavior, the course explores debates over what democracy is, the dynamics of breakthroughs from authoritarianism to democracy and the difficulties in consolidating fledgling democracies. Not open to students with credit for POLI SCI 505 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**POLI SCI/CHICLA/HISTORY 422 – LATINO HISTORY AND POLITICS**

3 credits.

Students will examine the historical, social, political, economic, and cultural experiences and conditions of Latinos, one of the largest US racial/ethnic minority groups. Course focus is on people who trace their origins to Mexico, the Caribbean, and countries of Latin America.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**POLI SCI/INTL ST 423 – SOCIAL MOBILIZATION IN LATIN AMERICA**

3 credits.

Introduction to the major empirical and theoretical themes in the study of mobilization in Latin America.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI/GEN&WS 429 – GENDER AND POLITICS IN COMPARATIVE PERSPECTIVE**

3-4 credits.

Examines the gendered nature of political institutions around the world, including implications of women's exclusions from public life in a global context; the obstacles to women's greater participation; how women have gained greater voice in political leadership in some countries; and the differences women make in the political arena. Not open to students with credit for POLI SCI 643 prior to fall 2017

**Requisites:** Sophomore standing; not open to special students

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/INTL ST 431 – CONTENTIOUS POLITICS**

3-4 credits.

Social movements, revolutions, and riots continually shape and re-shape the world around us. The course will evaluate and apply dominant theoretical approaches to understanding contention through careful attention to empirical cases throughout the world.

**Requisites:** Sophomore standing and POLI SCI 140 or INTL ST 101 (or POLI SCI 103 taken prior to fall 2017) or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 432 – COMPARATIVE LEGAL INSTITUTIONS**

3-4 credits.

A comparison of the role of law and legal institutions in the U.S. and other countries, with a focus on the state's use of law to achieve its political goals. Not open to students with credit for POLI SCI 617 prior to fall 2017

**Requisites:** POLI SCI 120, 182, or POLI SCI/LEGAL ST/POLI SCI 217 or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**POLI SCI/RELIG ST 433 – RELIGION AND POLITICS**

3-4 credits.

Explores the relationships and interactions between religion and politics from a comparative perspective. Discuss the appropriate relationship between religion and state. Investigate the implications of the various ways in which the religion-state relationship have been involved in political conflict. Building on this, turn to several of the current issues in religion and politics asking: Why is religion apparently more important than ever despite an increasingly secular world? What is religious nationalism? What is fundamentalism? How can we explain the similarities and differences between religious fundamentalist movements across the globe? How should democratic states cope with the emergence of fundamentalist movements? In order to begin answering these questions, integrate the theoretical frameworks we develop with explorations of the historical and local context of relevant case-studies from around the world.

**Requisites:** Sophomore standing and (POLI SCI 140, 120, RELIG ST 101, 102, 103, or INTL ST 101) or (POLI SCI 103 or 106 prior to fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI/INTL ST 434 – THE POLITICS OF HUMAN RIGHTS**

3-4 credits.

Examines the origins and development of human rights in international politics. The course discusses what human rights are, international human rights movements, the international search for justice after mass crimes, and international humanitarian intervention. Not open to students with credit for POLI SCI 317 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2022**POLI SCI/GEN&WS 435 – POLITICS OF GENDER AND WOMEN'S RIGHTS IN THE MIDDLE EAST**

3 credits.

Explores the intertwined relationship between gender and politics in contemporary Middle East and North Africa. Situates the region's historical, socio-political, and cultural context that have particularly contributed to shaping the current discourse on gender in the Arab World. Explores - both theoretically and empirically - the role of Arab women in influencing the political processes across the Middle East. Examines real-world examples of Middle Eastern women from different parts of the region who have succeeded to challenge the status quo and push for genuine change.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**POLI SCI/INTL ST 436 – POLITICAL INEQUALITY: MEASURES, CAUSES, EFFECTS AND REMEDIES**

3 credits.

In this course, we will review what political inequality is, and examine how scholars have measured it, and studied its causes, effects and remedies. The course will focus on inequalities in political participation and representation.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**POLI SCI 437 – NATIONALISM AND ETHNIC CONFLICT**

3-4 credits.

Nationalist conflict and ethnic contestation remain major components of global politics. Drawing on cases from around the world, this course explores why this is the case. In the process, we will address a number of crucial questions: What are nations and ethnic groups? Where do they come from? Why do they pick particular territories? How do they define who can be part of the group? Why are they so successful in mobilizing people to kill and be killed? In the course of answering these questions, the course investigates the interactions between nations and states, religion and nationalism, globalization, citizenship and minority rights, and the causes and solutions for national and ethnic conflict.

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 prior to fall 2017)**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**POLI SCI 438 – COMPARATIVE POLITICAL CULTURE**

3-4 credits.

In addition to political culture as conventionally defined, this course examines alternative political realities and the different understandings of politics that flow from them. It explores in detail the intersections between the realms of politics and culture in various selected regions of the world. Not open to students with credit for POLI SCI 657 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**POLI SCI/INTL ST 439 – THE COMPARATIVE STUDY OF GENOCIDE**

3-4 credits.

Examines the phenomenon of genocide in the modern world. The class covers the concept of genocide, theories of why genocide occurs, and particular cases in the 20th and 21st centuries. Not open to students with credit for POLI SCI 318 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2021

**POLI SCI/ECON/ENVIR ST/URB R PL 449 – GOVERNMENT AND NATURAL RESOURCES**

3-4 credits.

Problems of public policy and administration for development and use of natural resources.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**POLI SCI 455 – AFRICAN INTERNATIONAL RELATIONS**

3-4 credits.

Inter-state conflict and cooperation in Africa. Topics include Pan-Africanism, African Union, and regional integration; the international dimensions of regional crises; relations with great powers and with international financial institutions; and the role of non-state actors in international politics. Not open to students with credit for POLI SCI/CLASSICS/HISTORY 362 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**POLI SCI 460 – TOPICS IN POLITICAL PHILOSOPHY**

3-4 credits.

Investigation at an advanced level of selected problems in political philosophy.

**Requisites:** Sophomore standing and (POLI SCI 160 or ILS 205) or (POLI SCI 209 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 461 – INTERDISCIPLINARY SEMINAR IN POLITICAL ECONOMY, PHILOSOPHY, & POLITICS**

3 credits.

An interdisciplinary seminar focusing on current policy debates designed to incorporate concepts and approaches from philosophy, political science, and economics.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 463 – DECEPTION AND POLITICS**

4 credits.

This course deals with deception and truth telling as matters of fundamental political concern. Writers ranging from Plato to John Rawls have grappled with the problem of deception and truth-telling in politics. Flattery, hypocrisy, lying as a matter of state, lying as a matter of policy: philosophical explorations of these and related phenomena are at the center of this course.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/GEN&WS 469 – WOMEN AND POLITICS**

3-4 credits.

Changing political roles, status, attitudes, and behaviors of women in contemporary society and of the political implications of changing female/male relationships.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 470 – THE FIRST AMENDMENT**

3-4 credits.

An examination of the basic principles, purposes, and assumptions of First Amendment cases and literature, with attention to both historical and contemporary controversies.

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 481 – HONORS SEMINAR ON RACE AND POLITICS IN THE UNITED STATES**

3 credits.

This course examines the sources and policy implications of racial division in American politics by analyzing a range of issues, such as affirmative action in the workplace and in higher education, the use of black majority districts as a means of enhancing representation of minority interests in Congress, differences in public opinion between whites and blacks, and issues concerning multi-racial and ethnic tensions. We will examine the historical background of race relations and the current policy debates, with a focus on trying to find common-ground solutions. The goal of this seminar is to stimulate critical thinking on this important issue, causing students to think about race and politics in new ways.

**Requisites:** Junior standing and declared in an Honors program**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 490 – STUDY ABROAD TOPICS IN POLITICAL SCIENCE: AMERICAN GOVERNMENT**

1-4 credits.

An umbrella course for variable credit American government courses taken on study abroad programs.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**POLI SCI 510 – POLITICS OF GOVERNMENT REGULATION**

3-4 credits.

Analysis of US regulatory policy from a political perspective. Introduction of regulation theories from political science, law and economics. Evaluation of theories in settings of environmental protection, workplace health and safety, financial, communications and other areas of regulation. Not open to students with credit for POLI SCI 446 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**POLI SCI 511 – CAMPAIGN FINANCE**

3-4 credits.

Examination of campaign finance, including: the philosophical rationale behind campaign finance regulations, the history of regulatory frameworks, the influence of campaign contributions on decision making, campaign finance laws in other countries, and reform proposals. Not open to students with credit for POLI SCI 466 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 515 – PUBLIC OPINION**

3-4 credits.

Formation of opinions within and among the political publics; their role in the development and practice of governmental policy. Not open to students with credit for POLI SCI 473 prior to fall 2017

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI/AFROAMER 519 – AFRICAN AMERICAN POLITICAL THEORY**

3-4 credits.

Explores a range of theories that African Americans have drawn upon to cope with and ameliorate their political circumstances in the United States within the specific parameters of political theory.

**Requisites:** Sophomore standing and (POLI SCI 160 or AFROAMER 151) or (POLI SCI 209 taken prior to fall 2017) or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 529 – ARAB-ISRAELI CONFLICT**

3-4 credits.

Examines the political, social, and economic aspects of the evolution of the Arab-Israeli conflict over time, and the theoretical and policy issues it raises. Not open to students with credit for POLI SCI 631 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 120, 140, 182 or INTL ST 101) or (POLI SCI 103, 106, or 186 taken prior to fall 2017) or graduate standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017

**POLI SCI 534 – SOCIALISM AND TRANSITIONS TO THE MARKET**

3-4 credits.

Course focusing on state socialism as a political and economic system and the transition from that system in Eastern Europe, the former Soviet Union, China, and elsewhere. Not open to students with credit for POLI SCI 612 prior to fall 2017

**Requisites:** POLI SCI 120 or 182 or (POLI SCI 106 or 186 prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**POLI SCI 537 – ELECTORAL SYSTEMS AND REPRESENTATION**

3-4 credits.

The variety of institutions which are used to structure elections and representation around the world; voting rules, the structure of the legislature, cabinet formation, constitutional engineering and the art of political manipulation. Not open to students with credit for POLI SCI 656 prior to fall 2017

**Requisites:** POLI SCI 104, 120, 140, 160, 182, 184, POLI SCI/LEGAL ST/ POLI SCI 217 or INTL ST 101 or (POLI SCI 103, 106, 186, or 209 prior to fall 2017)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**POLI SCI 538 – POLITICS AND POLICIES IN THE EUROPEAN UNION**

3-4 credits.

An advanced undergraduate seminar on the European Union that introduces students to the academic literature on EU politics and current debates in the field of EU studies. Topics covered include political institutions, decision- and policy-making, parties, elections, interest representation, political contestation, public opinion, enlargement, the "democratic deficit," and current events- most importantly the ongoing Euro crisis.

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 prior to fall 2017)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI 590 – STUDY ABROAD TOPICS IN POLITICAL SCIENCE: POLITICAL THEORY**

1-4 credits.

An umbrella course for variable credit political theory courses taken on study abroad programs.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 601 – PROSEMINAR: TOPICS IN POLITICAL SCIENCE**

3 credits.

Intensive study and research in selected problems within the constituent fields of political science.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 602 – WISCONSIN IN WASHINGTON ADVANCED PUBLIC POLICY COURSE**

4 credits.

The public policy process is structured argument and decision making within institutional contexts. This class introduces students to analytic frameworks for thinking about various aspects of this process. We do not study a single context or policy, but, rather, seek to understand how policies might succeed (or fail) in one context or another. The principal framework is institutional analysis, or the way in which formal and informal rules shape policies and their outcomes. Students will learn to perform institutional analysis as well as write a memorandum presenting such an analysis to a policymaker. Students will align their final projects to their personal and professional activities and/or their internship. The course will help students understand how policies can achieve durable impact, and how progress made through policies can be defended amid institutional pitfalls.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**POLI SCI 635 – COMPARATIVE POLITICS OF SPORT**

3-4 credits.

Covers the political economy, political culture, and the politics of identity (nationalism, race, ethnicity, social class, religion, and gender) that is usually associated with sport at both the highest and lowest levels of competition. Not open to students with credit for POLI SCI 616 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018



**POLI SCI 652 – THE POLITICS OF DEVELOPMENT**

3-4 credits.

This course examines the political foundations, political dynamics, and political impact of economic development in the many regions collectively known as the "developing world" or "Third World".

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 prior to fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**POLI SCI 659 – POLITICS AND SOCIETY: CONTEMPORARY EASTERN EUROPE**

3-4 credits.

Comparative analysis of the countries of contemporary Eastern Europe, including issues of democratization, economic transition, and social change; political crises and institutional adjustments; interactions between regimes and domestic social forces; prospect for future systemic change.

**Requisites:** Sophomore standing and (POLI SCI 120 or 182) or (POLI SCI 106 or 186 taken prior to fall 2017) or graduate standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**POLI SCI 681 – SENIOR HONORS THESIS**

3-4 credits.

Honors in the major in Political Science thesis research and writing.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**POLI SCI 682 – SENIOR HONORS THESIS**

3-4 credits.

Honors in the Major in Political Science thesis research and writing (continuation of POLI SCI 681).

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**POLI SCI 683 – SENIOR HONORS THESIS SEMINAR**

3 credits.

A class for honors students writing their senior honors thesis within a seminar format. Focus is on conceptualization, research design, writing of the thesis, and relevant issues of political science. Only senior majors writing honor thesis.

**Requisites:** Junior standing and declared in an Honors program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 684 – SENIOR HONORS THESIS SEMINAR**

3 credits.

A class for honors students writing their senior honors thesis within a seminar format. Focus is on conceptualization, research design, writing of the thesis, and relevant issues of political science. Continuation of 683. Seniors only.

**Requisites:** POLI SCI 683, senior standing only, and declared in an Honors program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 690 – STUDY ABROAD TOPICS IN POLITICAL SCIENCE: COMPARATIVE POLITICS**

1-4 credits.

An umbrella course for variable credit comparative politics courses taken on study abroad programs.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2001

**POLI SCI 691 – SENIOR THESIS**

3 credits.

For students writing a thesis in consultation with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 692 – SENIOR THESIS**

3 credits.

For students writing a thesis in consultation with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**POLI SCI 698 – DIRECTED STUDY**

1-4 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 699 – DIRECTED STUDY**

1-4 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 700 – INTRODUCTION TO INTERNATIONAL POLITICS**

1 credit.

This course is designed to introduce students to the essential theoretical approaches to international politics, to explore important historical and contemporary questions and debates in international affairs, and to teach students to think critically about international relations. The course also introduces students to the skills and methods necessary for successful online learning.

**Requisites:** Declared in the International Politics and Practice Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2017

**POLI SCI 701 – AMERICAN FOREIGN POLICY**

3 credits.

The course provides a historical and analytical examination of U.S. Foreign Policy since World War II. The course is divided into three main topics: (1) the history of U.S. Foreign Policy since World War II, (2) an examination of the institutions and processes that guide foreign policy formation and implementation, and (3) a review and analysis of salient foreign policy challenges facing the U.S. today.

**Requisites:** POLI SCI 700 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**POLI SCI 702 – INTERNATIONAL POLITICAL ECONOMY**

3 credits.

Analyzes the interaction of politics and economics in the international arena, both historically and in the contemporary era of globalization. Focuses on international trade, monetary, and financial relations in both developed and developing economies.

**Requisites:** POLI SCI 700 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2018

**POLI SCI 703 – INTERNATIONAL ORGANIZATIONS AND LAW**

3 credits.

This course is intended to familiarize students with some of the major international organizations (IOs) and regimes of international law that have a profound effect on patterns of international cooperation and conflict.

**Requisites:** POLI SCI 700 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2015

**POLI SCI 704 – INTERNATIONAL SECURITY**

3 credits.

The course is a survey of security studies in international relations. The course is organized by empirical topic, with a mix of theoretical and empirical readings for most weeks. Topics include arms competition, the causes of war, war termination, third party intervention and conflict resolution, alliances, crisis bargaining, cooperation, deterrence, proliferation and terrorism. The emphasis will be on recent work.

**Requisites:** POLI SCI 700 or concurrent enrollment

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **POLI SCI/HISTORY/PUB AFFR 724 – THE POLITICS OF PERSUASION: SOFT POWER IN EUROPE AND THE U.S.**

1-3 credits.

How powerful is non-military power? What are its vectors and its limits? International relations theorists have defined soft power as "the ability to get what you want through attraction rather than coercion." This graduate seminar will put this notion to the test. We will investigate how elites, interest groups, religious bodies, and nation-states seek to exercise hegemony in the international order through non-violent means. How was "soft power" implemented on the ground in the 20th century- and how did its use transform international relations? To probe these questions, we will focus on a series of case studies in European and U.S. international history. Topics covered include the expansion of capitalism and consumer culture; the globalization of international legal instruments and human rights claims; and de-secularization, religious radicalism, and counter-insurgency. In the process of analyzing our case studies, we will refine our analytical vocabulary. Drawing on recent work in international relations, political theory, and international history, we will probe the meaning and utility of concepts like normative power, hegemony, cultural capital, and public diplomacy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

### **POLI SCI 799 – DIRECTED STUDY**

1-4 credits.

Directed Study restricted to graduate students. Intended for master's level students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

### **POLI SCI 800 – POLITICAL SCIENCE AS A DISCIPLINE AND PROFESSION**

1 credit.

Describes and evaluates major approaches used in political science. Explores issues related to professional development and political science careers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POLI SCI 801 – DISSERTATION PROPOSAL RESEARCH AND WRITING SEMINAR**

3 credits.

Provides structured support and mentorship for political science dissertation proposal writing. Includes topics such as defining relevant research questions, incorporating existing scholarship, developing a theory and research design and drafting a full prospectus.

**Requisites:** Declared in Political Science doctoral program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **POLI SCI/FRENCH/GERMAN/HISTORY/SOC 804 – INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR**

3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POLI SCI 811 – INTRODUCTION TO STATISTICAL COMPUTING IN POLITICAL SCIENCE**

1-3 credits.

Introduction to the issues of statistical computing in political science using statistical packages such as STATA and R with emphasis on developing sound practices for organizing data, protocols, and results in empirical research. Not open to students with credit for POLI SCI 553 prior to fall 2017

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **POLI SCI 812 – INTRODUCTION TO STATISTICAL METHODS IN POLITICAL SCIENCE**

3 credits.

Introductory statistics course for Ph.D. students. Emphasis on probability theory, inference, and the foundations of multivariate least squares and maximum likelihood.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POLI SCI 813 – MULTIVARIABLE STATISTICAL INFERENCE FOR POLITICAL RESEARCH**

3 credits.

Extensive treatment of multiple regression and its variants.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 814 – SOCIAL IDENTITIES: DEFINITION AND MEASUREMENT**

3 credits.

Analyzes the concept of social identities with a focus on definition, comparison, and measurement. Explores a range of theories as well as methodological techniques for measurement. Examines classic works on race, ethnic, national, class, gender, and religious identities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**POLI SCI 817 – EMPIRICAL METHODS OF POLITICAL INQUIRY**

3 credits.

Acquaints students with a wide variety of research methods used to analyze political phenomena, emphasizing both quantitative and qualitative approaches.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 818 – MAXIMUM LIKELIHOOD ESTIMATION**

3 credits.

Develops the theory of maximum likelihood estimation and applies it to models for discrete and limited dependent variables common to political and social science data.

**Requisites:** POLI SCI 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 821 – MASS POLITICAL BEHAVIOR**

3 credits.

An empirical analysis of the role of mass publics in political life and the factors which determine the formation and expression of political beliefs and attitudes.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 825 – RACE AND POLITICS IN THE UNITED STATES**

3 credits.

Analysis of the role of race, class and ethnicity in the political process. Evaluation of theories from political science, economics and sociology. Topics may include policy analysis, political organizations, immigration, political behavior and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**POLI SCI 826 – THE LEGISLATIVE PROCESS**

3 credits.

Analysis of legislative process and the role of the legislature in the political system, emphasizing current research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 828 – THE CONTEMPORARY PRESIDENCY: ISSUES AND APPROACHES**

3 credits.

Current topics of research interest on the American presidency. Alternative approaches and methods for the study of the presidency.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POLI SCI/JOURN 829 – POLITICAL COMMUNICATION**

3 credits.

This course examines the role of communication in American politics. Topics covered include the communication of politics (e.g., communication by politics elites, effects of mass media and interpersonal communication on political attitudes) as well as the politics of communications (regulation of political communication, policy issues, etc.).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI/CLASSICS 834 – ROMAN POLITICAL THOUGHT**

3 credits.

In depth study of key works of Roman political thought, along with recent and classic scholarship in political theory, history, philosophy, classics, and literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**POLI SCI/A A E 835 – GAME THEORY AND POLITICAL ANALYSIS**

3 credits.

An introduction to the tools of game theoretic analysis, with reference to the use of game theory in political science. Intended for those desiring a basic familiarity with the theory, and for those planning further work in formal modeling.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 836 – FORMAL MODELS OF DOMESTIC POLITICS**

3 credits.

Provides an overview of formal, i.e., game-theoretic, models of domestic politics. This course builds directly upon the material presented in Political Science 835.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 837 – FORMAL MODELS OF INTERNATIONAL RELATIONS**

3 credits.

Provides an overview of the formal theory literature in international relations, including international security and international political economy.

**Requisites:** A A E/POLI SCI/A A E 835

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**POLI SCI 839 – FIELD SEMINAR IN POLITICAL THEORY**

3 credits.

An overview of approaches to interpreting, teaching, and writing about political theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 840 – COMPARATIVE POLITICAL ECONOMY**

3 credits.

Survey of field of comparative political economy and in-depth study of political economy of democratic and non-democratic capitalist systems. Key themes include: business and labor relations, globalization and its impact on domestic political economies, rise of emergent powers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 843 – THE POLITICAL ECONOMY OF DEVELOPMENT**

3 credits.

We examine why some countries are rich, and others are poor. Selected topics include the role of institutions, regime type, corruption, the resource curse, ethnic differences and state capacity. We focus on the cutting edge of the empirical literature on development, and pay close attention to measurement and causal inference.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**POLI SCI 844 – DEMOCRATIC IMPERFECTIONS**

3 credits.

Democracies frequently depart from their ideal type. We focus on select problems with democracy, and examine their causes and effects, and remedies for them. Topics vary from year-to-year, and include inequalities in political representation and participation, a lack of accountability and ethnic voting.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**POLI SCI 846 – RACIAL AND ETHNIC DIVERSITY: CAUSES AND EFFECTS**

3 credits.

Focuses on the causes and effects of racial and ethnic diversity in a range of contexts across different countries. Includes the following topics: 1) definitions of diversity and how ethnic and racial diversity is measured; 2) the causes of diversity including migrations and state actions such as ethnic cleansing and colonialism, and later processes of immigration and segregation; 3) the effects of diversity or segregation, including on social relations, conflict, public good provision, and political behavior; and the effects of ethnic and racial diversity in organizations; and 4) considers ways of increasing diversity including affirmative action and quotas, and the effectiveness of diversity training. Readings will include cases studies from different countries and different time periods and will include a range of different racial and ethnic groups around the world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 850 – RELIGION AND POLITICS**

3 credits.

Examines the meanings of, and interactions between, religion and politics in comparative politics, international relations, and American politics. Explores the impact religion has on wide range of politically relevant outcomes and the mechanisms through which religion shapes those outcomes. Provides an overview of the main theoretical, conceptual, and empirical studies of religion and politics.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 851 – CONTENTIOUS POLITICS**

3 credits.

Why do people mobilize outside of routine political channels or institutions to pursue political change? How do we explain moments when people take to the streets or take up arms to accomplish their political goals? At the heart of these questions is one that has long formed a core of social science inquiry: how do scholars explain collective action, particularly in the face of often serious risks. Examine these questions through exploring leading theoretical themes in the study of social movements, revolutions, and riots. Explore how a variety of factors affect the where's, why's and how's of movement dynamics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**POLI SCI 853 – COMPARATIVE POLITICAL INSTITUTIONS**

3 credits.

Comparative theoretical and empirical analysis of political institutions, including electoral systems, legislatures, executives, executive-legislative relationships, political parties, party systems, federalism, economic governance, and link between institutions and internationalization.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**POLI SCI 854 – NATIONALISM AND ETHNIC CONFLICT**

3 credits.

Comparative analysis of nationalism, national identity, and ethnicity and their impact on domestic and international conflict. Examines relationship between nationality, citizenship, and minority rights; territoriality and identity, contemporary religious nationalism; relationship between globalization and nationalism.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**POLI SCI 855 – POLITICS AND CULTURE IN COMPARATIVE PERSPECTIVE**

3 credits.

Scholarly approaches linking cultural phenomena. Both theoretical and empirical patterns of politics and culture in several regions. The course also explores systematic linkages between politics and culture, evaluates common ways of studying them, and assesses their contemporary importance.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**POLI SCI 856 – FIELD SEMINAR IN COMPARATIVE POLITICS**

3 credits.

Introduction to leading concepts and theories in the field of comparative politics, including those relating to states, nations, regimes and development. Includes work on many different regions and countries employing a range of research strategies and methodologies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 857 – INTERNATIONAL RELATIONS THEORIES**

3 credits.

Analysis of the major theories on the functioning of the international political system and the behavior of nations within it.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**POLI SCI 862 – STATE AND SOCIETY IN COMPARATIVE PERSPECTIVE**

3 credits.

Reviews a range of approaches that focus on civil society, social movements, ethnic and religious based mobilization, as well as gender and class based approaches to state-society relations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**POLI SCI 864 – INTERNATIONAL POLITICAL ECONOMY**

3 credits.

Analysis of key classical and contemporary theories in international political economy.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**POLI SCI 865 – THE SUPREME COURT AND THE CONSTITUTION IN AMERICAN POLITICS**

3 credits.

Analysis of the development of major constitutional doctrines and their impact on politics and public policy in the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2014



**POLI SCI/ENVIR ST/PUB AFFR 866 – GLOBAL ENVIRONMENTAL GOVERNANCE**

3 credits.

In-depth examination of the political and policy challenges posed by global environmental degradation. Analysis of international institutions for managing the global environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**POLI SCI/PUB AFFR 871 – PUBLIC PROGRAM EVALUATION**

3 credits.

Compares the conceptual, statistical, and ethical issues of experimental, quasi-experimental and non-experimental designs for program evaluation. Definitions of outcomes, sample size issues, statistical biases in measuring causal effects of programs, and the reliability of findings will be emphasized using case studies selected from current public programs.

**Requisites:** PUB AFFR 818

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI 873 – AMERICAN POLITICAL PARTIES**

3 credits.

Reviews major approaches to analyzing political parties and understanding their developmental changes. Examines the parties in operation and the relationship of parties to the state and society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/PUB AFFR/URB R PL 874 – POLICY-MAKING PROCESS**

3 credits.

Examines the political, social, and economic contexts that shape and are shaped by policy making processes. Though the focus is on the US, international comparisons will be made, and students are encouraged to think about the American context through comparative and international perspectives. Familiarizes students with dominant theories and models of policymaking process and policy change, starting with the model of the policy cycle. Focuses in on key topics and issues in policy making, specifically, agenda setting, implementation, and the relationships between policymaking and democracy. Reflects on contemporary and emerging issues and dilemmas of the politics of policy making.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POLI SCI/PUB AFFR 875 – PUBLIC PERSONNEL ADMINISTRATION**

3 credits.

Analysis of personnel policies and practices in the public sector and examination of patterns of interaction between political executives, personnel professionals, public employees, and interest groups in the development of personnel policies. Compares problems and approaches of different countries as well as those of the various levels of government in the United States.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**POLI SCI/PUB AFFR/URB R PL 878 – PUBLIC MANAGEMENT**

3 credits.

Role of administration in American government; problems of organization, bureaucracy and control; public policy as the output of the administrative process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/PUB AFFR 885 – ADVANCED PUBLIC MANAGEMENT: CRAFT, CONSTRAINTS AND ACCOUNTABILITY**

3 credits.

Examines how managers in public and not-for-profit agencies can secure and utilize legal authority, human resources, and funds to accomplish organizational goals. Includes strategies for establishing and maintaining effective external relations and for working through other organizations to accomplish objectives.

**Requisites:** POLI SCI/PUB AFFR/URB R PL/POLI SCI/PUB AFFR 878

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI/PUB AFFR/URB R PL 890 – FEDERAL BUDGET AND TAX POLICY AND ADMINISTRATION**

3 credits.

Focuses on national budget and tax policy and administration, and the parallel processes at the state and local levels. Included are discussions of: decision-making theories; budget and tax policy; and analysis of normative and empirical criteria and analytical techniques for assessing alternative policy proposals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**POLI SCI 900 – TOPICS IN POLITICAL SCIENCE**

1-3 credits.

An umbrella course for variable credit topic courses, such as colloquia series, workshops, intensive summer courses, half-semester courses, etc.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 904 – SEMINAR-AMERICAN POLITICS**

3 credits.

In-depth examination of selected topics on American politics and governmental institutions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 917 – TIME SERIES ANALYSIS**

3 credits.

This course introduces students to time series methods and applications, including ARMA models, error corrections models and reduced form specifications. Course also discusses co-integration and fractional integration.

**Requisites:** POLI SCI 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POLI SCI 919 – SEMINAR-ADVANCED METHODOLOGY**

3 credits.

Design of research and adaptation of advanced methods to solve particular methodological problems in original analyses of political data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 930 – SEMINAR IN MODERN POLITICAL THOUGHT**

3 credits.

Exploration of themes from modern political thought.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 931 – SEMINAR-POLITICAL THEORY**

3 credits.

Analysis of and research on problems of theorizing in and about political life.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 932 – SEMINAR IN EARLY MODERN POLITICAL THEORY**

3 credits.

Study of selected topics or themes in early modern (c. 1500-1750 CE) political thought.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**POLI SCI/GEN&WS 933 – FEMINIST POLITICAL THEORY**

3 credits.

Focuses on how specific schools of feminist thought redefine the political, spanning historical and contemporary feminist political theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POLI SCI 935 – SEMINAR IN CONTEMPORARY POLITICAL THEORY**

3 credits.

Exploration of themes in contemporary political theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 936 – SEMINAR IN CONTINENTAL POLITICAL THOUGHT**

3 credits.

Exploration of themes central to study of continental political thought.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 937 – SEMINAR IN LEGAL AND CONSTITUTIONAL THEORY**

3 credits.

Exploration of themes in legal and/or constitutional theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**POLI SCI 940 – DOMESTIC POLITICS OF INTERNATIONAL RELATIONS**

3 credits.

Examines how domestic institutions and processes influence the international system. Also examines how international forces influence domestic politics in the areas of foreign policy, international political economy and security.

**Requisites:** POLI SCI 857**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**POLI SCI 945 – SEMINAR-NATIONAL SECURITY AFFAIRS**

3 credits.

Contemporary military strategy, the interaction of military and political factors in international politics, and the processes and content of defense policies, with emphasis on the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**POLI SCI 948 – SEMINAR: TOPICS IN COMPARATIVE POLITICS**

3 credits.

Research seminar on specific topics in comparative politics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**POLI SCI 949 – SEMINAR-POST COMMUNIST POLITICS**

3 credits.

Comparative study of political processes in the former Soviet Union and communist Eastern Europe states, focusing on the transition from and the continuing legacies of the communist experience; methodological issues in the study of post-communist politics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**POLI SCI 950 – PSYCHOLOGICAL APPROACHES TO INTERNATIONAL RELATIONS**

3 credits.

Designed around substantive topic areas, including reputation, personality, and emotions. Covers the broad patterns of scholarship in political psychology over the last 50 years. The larger methodological issues around political psychology and International Relations (IR) (how do you study this? what tradeoffs do the various approaches entail?) will form a backdrop to most of our discussions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**POLI SCI 959 – SEMINAR-INTERNATIONAL ORGANIZATION**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**POLI SCI 960 – SEMINAR-INTERNATIONAL RELATIONS**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2021**POLI SCI 962 – SEMINAR: LATIN-AMERICAN POLITICS**

3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**POLI SCI/URB R PL 969 – SEMINAR-TRENDS AND ISSUES IN PUBLIC PLANNING**

3 credits.

Critical review of recent and current thought on the nature and role of planning in governmental and quasi-governmental agencies with particular attention to the adverse critics of planning and the issues they raise about the policy formulation process in public affairs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**POLI SCI/A A E/ANTHRO/C&E SOC/GEORG/HISTORY/LACIS/PORTUG/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**POLI SCI/AFRICAN/ANTHRO/ECON/GEORG/HISTORY 983 – INTERDEPARTMENTAL SEMINAR IN AFRICAN STUDIES TOPICS**

3 credits.

Interdisciplinary inquiry in African societies and cultures.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021

**POLI SCI 986 – POLITICAL THEORY WORKSHOP**

1-3 credits.

Presentation and evaluation of political theory research in progress by members of the workshop and invited speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 987 – COMPARATIVE POLITICS COLLOQUIUM**

1-3 credits.

Presentation and evaluation of comparative politics research in progress by members of the workshop and invited speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 988 – INTERNATIONAL RELATIONS COLLOQUIUM**

1-3 credits.

Presentation and evaluation of International Relations research in progress by members of the workshop and invited speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 989 – AMERICAN POLITICS WORKSHOP**

1 credit.

Presentation and evaluation of American politics research in progress by members of the workshop and invited speakers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 990 – RESEARCH AND THESIS**

1-3 credits.

Under the direction of faculty.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POLI SCI 999 – INDEPENDENT WORK**

2-3 credits.

Under the direction of a staff member.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## POPULATION HEALTH SCIENCES (POP HLTH)

**POP HLTH 370 – INTRODUCTION TO PUBLIC HEALTH: LOCAL TO GLOBAL PERSPECTIVES**

3 credits.

Introduces principles of public health. Uses local and global health problems as examples to introduce epidemiology and evidence-based public health, with a focus on closing the gap between science and practice.

**Requisites:** None

**Course Designation:** Breadth - Either Social Science or Natural Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH/B M I 451 – INTRODUCTION TO SAS PROGRAMMING FOR POPULATION HEALTH**

2 credits.

Use of the SAS programming language for the management and analysis of biomedical data.

**Requisites:** Declared in the Population Health, Epidemiology or Clinical Investigation graduate program.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH/ENVIR ST 471 – INTRODUCTION TO ENVIRONMENTAL HEALTH**

3 credits.

Impact of environmental problems on human health; biological hazards to human health from air and water pollution; radiation; pesticides; noise; problems related to food, occupation and environment of the work place; accidents. Physical and chemical factors involved.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH/ENVIR ST 502 – AIR POLLUTION AND HUMAN HEALTH**

3 credits.

Toxicologic, controlled and epidemiologic studies on major air pollutants. Overview of study methods, lung physiology and pathology; air pollution sources, types, meteorology, sampling methods, controls and regulations.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH/NURSING 525 – NURSING LEADERSHIP FOR GLOBAL HEALTH**

2-3 credits.

Designed to prepare undergraduate and graduate nursing students for leadership in global health (GH) by examining their GH goals in a framework that integrates knowledge from nursing with contemporary GH knowledge. Directed toward improving health of the global population as a whole, the framework addresses health trends, practice frameworks, the ecological model, ethics, nursing leadership roles, concepts of partnership and evidence-based practice.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2016**POP HLTH/ECON/PUB AFFR 548 – THE ECONOMICS OF HEALTH CARE**

3-4 credits.

Analysis of the health care industry. Markets for hospitals and physicians' care, markets for health manpower, and the role of health insurance.

**Requisites:** ECON 301, ECON 311, or PUB AFFR 880**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**POP HLTH/B M I 551 – INTRODUCTION TO BIOSTATISTICS FOR POPULATION HEALTH**

3 credits.

Designed for population health researcher. Topics include descriptive statistics, elementary probability, probability distributions, one- and two-sample normal inference (point estimation, hypothesis testing, confidence intervals), power and sample size calculations, one- and two-sample binomial inference, underlying assumptions and diagnostic work.

**Requisites:** Declared in the Population Health, Epidemiology or Clinical Investigation graduate program. Not open to students with credit for BMI/STAT/B M I 541**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**POP HLTH/B M I 552 – REGRESSION METHODS FOR POPULATION HEALTH**

3 credits.

Introduction to the primary statistical tools used in epidemiology and health services research; multiple linear regression, logistic regression and survival analysis.

**Requisites:** B M I/STAT/B M I 541 or B M I/POP HLTH/B M I 551**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**POP HLTH/HIST SCI/MED HIST 553 – INTERNATIONAL HEALTH AND GLOBAL SOCIETY**

3 credits.

Major problems in international health from 1750 to the present. Focus on disease epidemiology and ecology; political economy of health; migration; quarantine; race, ethnicity, and health care; international health research; cross-cultural healing; mental and maternal health; growth of international health organizations.

**Requisites:** Junior standing**Course Designation:** Breadth – Either Humanities or Social Science Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**POP HLTH/M M & I 603 – CLINICAL AND PUBLIC HEALTH MICROBIOLOGY**

5 credits.

Describe microorganisms of clinical and public health significance, discuss issues and controversies of specimen receiving and processing, bacteremia, serodiagnosis of infectious agents, antimicrobial susceptibility testing, laboratory management, and novel approaches to detect infectious agents.

**Requisites:** None**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**POP HLTH/NUTR SCI 621 – INTRODUCTION TO NUTRITIONAL EPIDEMIOLOGY**

1 credit.

Techniques used to evaluate relationships of diet to health and disease in human populations; integration of knowledge gained with results of animal and clinical studies toward understanding dietary risk or protective factors for disease. Includes advanced diet assessment and basic epidemiologic approaches.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHMCOL-M 625 – TOXICOLOGY I**

3 credits.

Basic principles of toxicology and biochemical mechanisms of toxicity in mammalian species and man. Correlation between morphological and functional changes caused by toxicants in different organs of the body.

**Requisites:** (BIOCHEM 501 or 508) and (ANAT&PHY 335, 435, or (BIOCORE 485 486)) and PATH 404; or graduate/professional standing  
**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**POP HLTH/M&ENVTOX/PATH/PHM SCI/PHM COL-M 626 – TOXICOLOGY II**

3 credits.

Survey of the basic methods and fundamental biochemical mechanisms of toxicity. Toxicity in mammalian organ systems, techniques for evaluating toxicity, as well as mechanisms of species specificity, and environmental interactions (with toxicant examples) are presented.

**Requisites:** MENVTOX/ONCOLOGY/PHM COL-M/PHM SCI/POP HLTH/M&ENVTOX/ONCOLOGY/PHM SCI/PHM COL-M 625

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH/GENETICS/MD GENET 636 – PUBLIC HEALTH GENOMICS**

1 credit.

Provides an introduction to public health genomics through a review of fundamental principles of genetics, the use of genetic information in clinical and research settings, and its implications for disease management and prevention, and health promotion. Explores policies that guide public health and discusses current ethical, legal, and social implications of these policies.

**Requisites:** (Junior standing and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151) or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**POP HLTH 640 – FOUNDATIONS IN GLOBAL HEALTH PRACTICE**

1 credit.

An interdisciplinary course designed to prepare students for specific global health field experiences.

**Requisites:** None

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2021

**POP HLTH 644 – INTERDISCIPLINARY PERSPECTIVES ON GLOBAL HEALTH AND DISEASE**

1 credit.

Addresses a variety of global health topics through study of a specific country. Consider health data, health systems, historical and cultural information, and concepts of cultural competence and cultural humility.

**Requisites:** None

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**POP HLTH 650 – SPECIAL TOPICS**

1-6 credits.

Variable content course.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POP HLTH/B M I 651 – ADVANCED REGRESSION METHODS FOR POPULATION HEALTH**

3 credits.

Extension of regression analysis to observational data with unequal variance, unequal sampling and propensity weights, clusters and longitudinal measurements, using different variance structures, mixed linear models, generalized linear models and GEE. Matrix notation will be introduced and underlying mathematical and statistical principles will be explained. Examples use data sets from ongoing population health research.

**Requisites:** B M I/POP HLTH/B M I 552

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH/B M I 652 – TOPICS IN BIOSTATISTICS FOR EPIDEMIOLOGY**

1-3 credits.

Each module will adopt an in-depth focus on a biostatistical method of particular relevance to epidemiology such as measurement error, missing data, intermediate variables, complex study designs, meta-analysis, splines, propensity scores, causal inference, spatial statistics and resampling. One or more modules will be offered every spring semester.

**Requisites:** B M I/POP HLTH/B M I 552

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**POP HLTH 699 – INDEPENDENT READING**

1-5 credits.

To gain additional information on specific research problems or advanced training in the areas covered by department staff.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



### **POP HLTH/ISSUE 703 – QUALITY OF HEALTH CARE: EVALUATION AND ASSURANCE**

1-3 credits.

Implementation, oversight, and management of quality-oriented activities in health care settings. Overview of current and historical activities, approaches, and issues confronting health care related to quality assessment, assurance, and improvement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **POP HLTH/MEDICINE/NURSING 705 – SEMINAR IN INTERDISCIPLINARY CLINICAL RESEARCH EVIDENCE**

2 credits.

Exploration of interdisciplinary clinical research questions including strategies for assessing the evidence and conducting a systematic review of research. An interdisciplinary perspective is emphasized throughout the course.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and BMI/STAT/BMI 542

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **POP HLTH 709 – TRANSLATIONAL AND OUTCOMES RESEARCH IN HEALTH AND HEALTH CARE**

3 credits.

Seeks to review the conceptualization of translational and outcomes research in health and health care settings; to illustrate basic concepts and methods in research as applied to current issues in health and health care settings; and to understand the diverse perspectives that can be used to inform translational and outcomes research in different organizations, including those based within communities.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POP HLTH 712 – INTEGRATING MEDICINE AND PUBLIC HEALTH**

1 credit.

Provides an introduction to public health and opportunities to meet and discuss key concepts with an exciting variety of physician leaders who have integrated medicine public health in their careers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POP HLTH 713 – EPIDEMIOLOGY OF HIV/AIDS**

1 credit.

Provides an overview of the AIDS pandemic in the United States and worldwide. Topics covered include a review of the epidemiology of AIDS, the natural history of HIV disease, strategies to prevent and treat HIV, and local and global health impact with a focus on historically significant milestones as well as promising current and future research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

### **POP HLTH 718 – PRINCIPLES OF GLOBAL HEALTH CARE SYSTEMS**

2 credits.

Addresses and analyzes differences in health status and methods of organizing and providing health services in countries with varying levels of development and types of socio-political systems. Develops an understanding of the various avenues of international cooperation in health.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **POP HLTH 721 – CONSPIRACIES IN PUBLIC HEALTH**

2 credits.

Skepticism and conspiracism can be barriers to successful implementation of public health and medical interventions such as vaccination, fluoridation of water, and HIV treatment. Conversations between people with opposing viewpoints, whether face-to-face or via social media, often devolve to disparagement and dismissal. Awareness of or experience with such exchanges causes us to avoid tackling such "hot button" topics with friends, colleagues, and members of our communities. While it is all too easy to believe people who adopt conspiracy theories to be members of the fringe, research has shown that medical conspiracy theories are widely known, broadly endorsed, and highly predictive of many common health behaviors. Prepares health professionals to educate communities about important public health and medical interventions.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH 728 – CLIMATE CHANGE MEDICINE**

2 credits.

Climate change threatens human health through multiple exposure pathways, from heatwaves, storms and air pollution episodes, to influences on infectious diseases, nutrition and mental health. Gain thorough and up to date review of these health links and learn present strategies for preparedness and prevention. Medical students will be introduced to a "Health in all Policies" approach that is essential to optimize the potential for medical interventions to address the health risks from climate change, as well as potential health benefits from mitigating the root causes of climate change.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**POP HLTH 729 – PREPAREDNESS IN PUBLIC HEALTH**

2 credits.

Provides an overview of various types of public health emergencies and disasters including the organizations and disciplines that prepare and respond to natural and unnatural emergencies. Gain an understanding of how public health officials, public health practitioners, state and local health department staff, health care personnel and emergency responders plan for and respond to public health emergencies. The role of the physician will specifically be explored.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**POP HLTH/ENVIR ST 739 – CLIMATE CHANGE, HUMAN AND PLANETARY HEALTH**

2 credits.

Provide tools to identify and address real-world global environmental health issues, stemming from climate change, habitat destruction leading to disease spillover events, food insecurity, and urban design.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**POP HLTH 750 – CANCER EPIDEMIOLOGY**

3 credits.

Covers current knowledge on cancer occurrence and control in human populations. Design and analysis approaches appropriate for cancer epidemiology will also be discussed. Familiarity with basic biological and epidemiologic concepts is desirable.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**POP HLTH 784 – PUBLIC HEALTH SURVEILLANCE AND ANALYTICS**

3 credits.

Learn applied techniques for community health assessment and surveillance. Population health data (including census, natality, mortality, hospital discharge, behavioral risk factor) are retrieved for analysis and interpretation.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**POP HLTH/M&ENVTOX 789 – PRINCIPLES OF ENVIRONMENTAL HEALTH: A SYSTEMS THINKING APPROACH**

3 credits.

Provides an overview of the field of environmental health, using a systems thinking approach. Systems thinking recognizes that environmental health problem solving is complex and that solutions in one area may have positive or negative impacts on other areas. An introduction to the history of environmental health within the field of public health from the local to the federal and global level. Introduces multiple disciplines, methods and approaches to numerous environmental health topics. Includes introduction to methods and tools necessary for assessing human health risks from a variety of environmental hazards and exposures found in air, land, and water with a focus on physical and chemical risks. Additional details regarding specific hazard, exposure and health outcome data and their relationship to environmental health risk assessment, environmental health decision-making and management form a public health practice perspective will be discussed.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**POP HLTH/KINES 791 – PHYSICAL ACTIVITY EPIDEMIOLOGY**

3 credits.

Recommendations for and surveillance of physical activity in the U.S., and associations with health and disease at the population level. Emphasis on measurement techniques, study design and research considerations.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**POP HLTH 794 – BIOLOGICAL BASIS OF POPULATION HEALTH**

2 credits.

Covers the physiology, biology and biochemistry of selected disease processes deemed to be important in population health sciences by virtue of their clinical significance including incidence, mortality and morbidity.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019

### **POP HLTH 795 – PRINCIPLES OF POPULATION HEALTH SCIENCES**

1-3 credits.

Introduction to multiple determinants of health including medical care, socioeconomic status, the physical environment and individual behavior, and their interactions. Also covered will be the definition and measurement of population health, economic concepts in population health, and ethical and managerial issues in population health improvement.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POP HLTH 796 – INTRODUCTION TO HEALTH SERVICES RESEARCH**

3 credits.

Introduces students to a variety of perspectives, substantive areas and methodological approaches to health services research that provide the foundation for understanding the structure, process and outcomes of the U.S. health care system.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POP HLTH/SOC 797 – INTRODUCTION TO EPIDEMIOLOGY**

3 credits.

Design, implementation and interpretation of epidemiologic studies; emphasis on methodologic problems in the measurement of disease frequency, natural history and risk factors.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POP HLTH 798 – EPIDEMIOLOGIC METHODS**

3 credits.

The main emphasis is the design and interpretation of epidemiologic studies. Includes hands-on experience in the evaluation of epidemiologic evidence, the analysis of epidemiologic data, and the discussion of strategies aimed to improve study validity and efficiency.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POP HLTH 801 – EPIDEMIOLOGY OF INFECTIOUS DISEASES**

3 credits.

Introduces basic methods to studying the epidemiology of infectious diseases and reviews infectious diseases of major public health importance. Covers the basics of microbiology, immunology, and laboratory-based methods and the principles of disease surveillance, outbreak investigation, mathematical models of disease transmission, and prevention strategies. The etiology, epidemiology, prevention, and treatment of ancient, modern, and emerging infectious diseases will be examined.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **POP HLTH 805 – ADVANCED EPIDEMIOLOGY: CAUSAL INFERENCE IN EPIDEMIOLOGICAL STUDIES**

3 credits.

Focuses on the use of viewpoints and design/analytical tools to render possible the estimation of causal effects in epidemiologic studies. Students learn about the rationale and use of study designs/analytic tools that build upon but are substantially different from the most common approaches used in epidemiologic research (experimental studies, case-control studies, and cohort studies).

**Requisites:** POP HLTH/SOC/POP HLTH 797 and POP HLTH 798

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **POP HLTH 806 – ADVANCED EPIDEMIOLOGY: PRACTICE OF EPIDEMIOLOGY**

3 credits.

Apply and extend methodologic knowledge learned in prior courses in the Population Health Sciences epidemiology methods sequence to selected key activities of a practicing epidemiologic researcher, including: study implementation; scientific writing and presentation; manuscript and grant peer-reviewing; measurement validation, simulation studies and sensitivity analyses; and, commonly-used epidemiology field instruments and methods.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and POP HLTH 798

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH/OBS&GYN 807 – REPRODUCTIVE AND PERINATAL EPIDEMIOLOGY**

2 credits.

Provides an overview of the current knowledge and research in reproductive and perinatal epidemiology. Through reading of the primary and secondary literature, examine issues related to topics such as fertility, preconception health, and perinatal outcomes including maternal morbidity and mortality, pregnancy loss, and infant outcomes. Current evidence-based strategies designed to improve reproductive and perinatal outcomes are reviewed. Long-term health implications of pregnancy and infant health are considered.

**Requisites:** POP HLTH/SOC/POP HLTH 797**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**POP HLTH 810 – GLOBAL HEALTH EPIDEMIOLOGY**

2 credits.

Explores the relationship between globalization and health and provides an understanding of: (a) indicators and determinants of health and health disparities across populations, from less to more developed countries; (b) the application of epidemiology to evaluate population health, identify global public health priorities, monitor progress toward public health goals, and develop and evaluate interventions to improve global health and reduce health disparities; and (c) some practical and ethical considerations in global health research. Exposure to the "One Health" perspective and to research and clinical work of University of Wisconsin-Madison faculty members working in the field of global health epidemiology, and is designed to identify ways that epidemiology can contribute to improvements in global health.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**POP HLTH 819 – SOCIAL NETWORK ANALYSIS AND HEALTH**

3 credits.

Provides an overview and synthesis of research utilizing social network analysis in relation to health, drawing on studies by sociologists, economists, computer scientists, physicians and health services researchers. Enables students to understand how social network data are collected and processed; how to calculate appropriate network measures; how to apply statistical modeling of social network effects on health behavior. Surveys social network studies related to substance use, smoking, contraception, AIDS, obesity and many other health conditions. Also looks at the social networks of health organizations in relation to patient outcomes. Prior coursework in data analysis and statistical methods is recommended.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**POP HLTH 820 – GRADUATE RESEARCH SEMINAR**

1 credit.

Presentations by graduate students, professors, public health professionals and experts designed to cover the depth and breadth of research in the field of population health.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**POP HLTH 845 – SEMINAR IN HEALTH AND MENTAL HEALTH ECONOMICS**

1-3 credits.

Provides an overview of current topics in health and mental health economics. The main objectives of this seminar is to acquaint students with important current topics, literature, and scholarship in this field.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**POP HLTH 847 – CARDIOVASCULAR EPIDEMIOLOGY**

1 credit.

The main emphasis is the discussion of the population distribution, health impact, risk factors, treatment, and prevention of cardiovascular diseases.

**Requisites:** POP HLTH/SOC/POP HLTH 797**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**POP HLTH/ECON 848 – HEALTH ECONOMICS**

1-3 credits.

Health economics issues including demand, supply and pricing, market structure, medical malpractice, technological change, value of life, role of insurance, and other aspects of uncertainty.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**POP HLTH/AN SCI/GENETICS 849 – GENETIC EPIDEMIOLOGY**  
3 credits.

This course will provide an introduction to genetic epidemiology. Topics will include a general overview of genetics and Mendelian and complex inheritance, as well as various elements of study design, including participant ascertainment; phenotype definition; biologic sample selection; genotyping, sequencing, and quality control; measurement of covariates, and choice of analytic methods. We will briefly discuss some of the original study designs and then focus on current study designs for the remainder of the class. Additional emerging topics will be briefly touched upon. Students will complete short homework assignments to enforce concepts learned during lectures, discuss journal articles, and prepare a very short grant application for the mid-term project. In the final weeks of class, students will work together to analyze data from a real genetic study, prepare tables, interpret the findings, and present their project to their peers.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH/I SY E 875 – COST EFFECTIVENESS ANALYSIS IN HEALTH AND HEALTHCARE**  
3 credits.

Basic ideas and tools of cost effectiveness analysis as applied in evaluating medical technologies. Addresses special problems and methods in assessing diagnostic technologies, including ROC analysis, and in measuring health for technology assessment. Uses "classical" and current journal literature.

**Requisites:** POP HLTH/SOC/POP HLTH 797 and B M I/POP HLTH/ B M I 552

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH 876 – MEASURING HEALTH OUTCOMES**  
3 credits.

Provides a comprehensive understanding of health outcome measures, including generic health status measures, disease-specific measures, and consumer reports of the quality of care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**POP HLTH/A A E/ENVIR ST/PUB AFFR 881 – BENEFIT-COST ANALYSIS**  
3 credits.

Presents the welfare economics underpinnings for evaluating the social benefits and costs of government activities. Issues such as uncertainty, the social discount rate, and welfare weights will be discussed; case studies from the environmental, social policy, and agricultural areas will be studied.

**Requisites:** Graduate/professional standing and (PUB AFFR 818 and 880), or I SY E/POP HLTH/I SY E 875, or A A E 635

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**POP HLTH 904 – SPECIAL TOPICS IN EPIDEMIOLOGY**  
1-3 credits.

In-depth focus on current areas of epidemiologic investigation. Each semester one or more modules (e.g., cardiovascular, cancer, infectious diseases, women's health, international, etc.) will be offered.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**POP HLTH 915 – INTERNATIONAL HEALTH SYSTEMS AND POLICY**  
2 credits.

Designed as an independent study with four modules: International Health System Performance; Health Systems in the Context of Global Health Needs; Health Systems in High Income Countries; and the Politics of Health System Development and Reform.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**POP HLTH 917 – GENERAL PREVENTIVE MEDICINE AND PUBLIC HEALTH ELECTIVE**  
4 credits.

Introduction to the role of physicians working in various fields of general preventive medicine and public health. Engage with preventive medicine faculty and residents to learn foundational knowledge and skills central to the discipline. Opportunity to select a health issue in Wisconsin and work on a short term project to describe, analyze or address the issue.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**POP HLTH 918 – ENVIRONMENTAL HEALTH AND ADVOCACY**

2 credits.

Unique opportunity to gain insight into the role of environmental toxins while honing skills to advocate for patients and vulnerable populations. Learn to take environmental histories and understand how environmental medicine is applied in the clinical setting and community. Use the socio-ecological model to frame advocacy. Gain practical experience through online didactic lectures, reading materials, class discussion, reflections and a class presentation

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**POP HLTH/KINES 955 – SEMINAR - PHYSICAL ACTIVITY EPIDEMIOLOGY**

1 credit.

Current research developments in physical activity epidemiology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**POP HLTH 990 – RESEARCH**

1-8 credits.

Research supervised by individual faculty members.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## PORTUGUESE (SPANISH AND PORTUGUESE) (PORTUG)

**PORTUG 101 – FIRST SEMESTER PORTUGUESE**

4 credits.

First-semester elementary-level Portuguese language practice: grammar, conversation, and reading. Requires no previous knowledge of Portuguese.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PORTUG 102 – SECOND SEMESTER PORTUGUESE**

4 credits.

Second-semester elementary-level Portuguese language practice: grammar, conversation, and reading.

**Requisites:** PORTUG 101**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PORTUG 201 – THIRD SEMESTER PORTUGUESE**

4 credits.

First-semester intermediate-level Portuguese language review: readings, culture, and patterns of conversation.

**Requisites:** PORTUG 102 or 301**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PORTUG 202 – FOURTH SEMESTER PORTUGUESE**

4 credits.

Second-semester intermediate-level Portuguese language review: readings, culture, and patterns of conversation.

**Requisites:** PORTUG 201**Course Designation:** Frgn Lang - 4th semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**PORTUG 207 – PORTUGUESE FOR BUSINESS**

4 credits.

Second-year Portuguese language course focusing on needs specific to business.

**Requisites:** PORTUG 102 or 301**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**PORTUG 221 – INTRODUCTION TO LUSO-BRAZILIAN LITERATURES**

4 credits.

Reading, discussion, and literary history of the sixteenth, nineteenth, and twentieth centuries.

**Requisites:** PORTUG 202**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**PORTUG 225 – THIRD YEAR CONVERSATION AND COMPOSITION**  
3 credits.

First-semester Intermediate High intensive practice in reading, writing, and grammar.

**Requisites:** PORTUG 202

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PORTUG 226 – THIRD YEAR CONVERSATION AND COMPOSITION**  
3 credits.

Second-semester Intermediate High intensive practice in reading, writing, and grammar.

**Requisites:** PORTUG 202 or 225

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PORTUG 299 – DIRECTED STUDY**  
1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2004

**PORTUG 301 – INTENSIVE PORTUGUESE**  
4 credits.

Grammar, conversation, and reading. Equivalent of PORTUG 101 and 102.

**Requisites:** SPANISH 226, FRENCH 228, or ITALIAN 311. Not open to students with credit for PORTUG 101 and 102

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PORTUG 302 – INTENSIVE PORTUGUESE**  
4 credits.

Equivalent of the third and fourth college semesters of Portuguese. Readings, culture, and patterns of conversation.

**Requisites:** PORTUG 102 or 301. Not open to students with credit for PORTUG 201 and 202

**Course Designation:** Frgn Lang - 4th semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**PORTUG 311 – FOURTH YEAR COMPOSITION AND CONVERSATION**  
3 credits.

Fourth-year first-semester advanced oral practice and writing.

**Requisites:** PORTUG 202, 225, 226, or 301

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PORTUG 312 – FOURTH YEAR COMPOSITION AND CONVERSATION**  
3 credits.

Fourth-year second-semester advanced oral practice and writing.

**Requisites:** PORTUG 202, 225, 226, or 301

**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**PORTUG 330 – HISTORY OF THE PORTUGUESE LANGUAGE**  
3 credits.

Introduction to the linguistic sources and the historical and political factors that contributed to the formation of Portuguese and the current status of Portuguese in the world today.

**Requisites:** PORTUG 225 or 226

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**PORTUG 361 – PORTUGUESE CIVILIZATION**  
3 credits.

Cultural evolution from the medieval period through the twentieth century. Conducted in English.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PORTUG 362 – BRAZILIAN CIVILIZATION**  
3 credits.

Cultural evolution of Brazil from 1500 through the present. Conducted in English.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**PORTUG 364 – HISTORICAL AND CULTURAL TRADITIONS OF BRAZIL**

2 credits.

Examination of Brazilian cultural and artistic representations.

**Requisites:** PORTUG 225 or 226**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**PORTUG 411 – SURVEY OF PORTUGUESE LITERATURE BEFORE 1825**

3 credits.

Advanced survey of Portuguese literature from 1140 to 1825.

**Requisites:** PORTUG 221 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2017**PORTUG 412 – SURVEY OF BRAZILIAN LITERATURE BEFORE 1890**

3 credits.

Advanced survey of Brazilian literature from 1500 to 1890.

**Requisites:** PORTUG 221 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**PORTUG/FRENCH/ITALIAN/SPANISH 429 – INTRODUCTION TO THE ROMANCE LANGUAGES**

3 credits.

Introduction to structural similarities and differences apparent in major Romance languages (French, Italian, Portuguese, Spanish) and to their historical developments, with reference to basic linguistic features of each language: phonology, morphology, syntax, and lexicon.

**Requisites:** SPANISH 226, FRENCH 228, ITALIAN 311, or PORTUG 226**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PORTUG/GEN&WS 450 – BRAZILLIAN WOMEN WRITERS**

3 credits.

A survey of representative writing by contemporary Brazilian women writers in relation to representations of nationality, race, class, ethnicity, gender and sexualities.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**PORTUG/AFRICAN 451 – LUSOPHONE AFRICAN LITERATURE**

3 credits.

Chronological and thematic survey of major trends, authors, and works of Lusophone Africa since 1936.

**Requisites:** PORTUG 221 and 312**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**PORTUG/GEN&WS 460 – CARMEN MIRANDA**

3 credits.

Examines the work, representation and interpretation of Carmen Miranda from her early days as a radio star in Brazil to a film actress and entertainer in Hollywood in the 1940s and 50s.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**PORTUG 467 – SURVEY OF PORTUGUESE LITERATURE SINCE 1825**

3 credits.

Advanced survey of Portuguese literature since 1825.

**Requisites:** PORTUG 221 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021

**PORTUG 468 – SURVEY OF BRAZILIAN LITERATURE SINCE 1890**

3 credits.

Advanced survey of Brazilian literature since 1890.

**Requisites:** PORTUG 221 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**PORTUG 573 – TOPICS IN PORTUGUESE: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison resident study abroad program that has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program required.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**PORTUG 640 – TOPICS IN LUSO-BRAZILIAN LITERATURE**

3 credits.

Examination of a variety of literary genres or periods in relation to Portuguese-speaking countries.

**Requisites:** PORTUG 221 or graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PORTUG 642 – TOPICS IN LUSO-BRAZILIAN CULTURE**

3 credits.

Examines a variety of cultural topics in relation to Portuguese-speaking countries.

**Requisites:** PORTUG 225, 226, 311, 312 or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**PORTUG 681 – SENIOR HONORS THESIS**

3 credits.

First-semester independent study with the goal of completing the preliminary research to write a senior honors thesis in Portuguese.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**PORTUG 682 – SENIOR HONORS THESIS**

3 credits.

Second-semester independent study with the goal of completing the preliminary research to write a senior honors thesis in Portuguese. Continuation of PORTUG 681.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**PORTUG 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**PORTUG 751 – SEMINAR: BRAZILIAN LITERATURE**

3 credits.

Seminar focusing on literature, literary criticism, culture, or theory relevant to Brazilian Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2019**PORTUG 772 – SEMINAR: PORTUGUESE LITERATURE**

3 credits.

Seminar focusing on literature, literary criticism, culture, or theory relevant to Portuguese Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**PORTUG 899 – INDEPENDENT READING**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**PORTUG/A A E/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/  
POLI SCI/SOC/SPANISH 982 – INTERDEPARTMENTAL SEMINAR  
IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PORTUG 990 – THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

## PSYCHIATRY (PSYCHIAT)

**PSYCHIAT 699 – INDEPENDENT STUDY**

0-5 credits.

Self-directed work under the supervision and guidance of a faculty member or instructional staff, and often in conjunction with a day-to-day mentor that is a graduate student or postdoc researcher in the faculty member's or instructor's group. Students normally participate in aspects of ongoing research projects.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCHIAT 712 – FOUNDATIONS IN INFANT, EARLY CHILDHOOD  
AND FAMILY MENTAL HEALTH: DEV, SCREENING, ASSESSMENT  
AND DIAG**

3 credits.

Provides a comprehensive understanding of the underpinnings of Infant, Early Childhood and Family Mental Health. Learn about pregnancy, transition to parenthood and typical/atypical development and attachment relationships. Become familiar with reliable and valid screening and assessment tools of social, emotional, cognitive, communication, motor and regulatory capacities in infants and young children in the context of their caregiving relationships; developmentally appropriate diagnostic nosologies; methods of conceptualizing risk and protective factors; and planning for therapeutic interventions that build on strengths and address vulnerabilities. Unique features include assessment of early parent-child relationships and the use of video replay to engage parents in assessing their relationship with their child and the benefit of faculty from multiple departments at UW and luminary national guest instructors.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCHIAT 713 – SEMINAR IN REFLECTIVE PRACTICES AND  
MINDFULNESS IN INFANT, EARLY CHILDHOOD & FAMILY MENTAL  
HEALTH I**

2 credits.

Provides a foundation in reflective practices through discussion of cases, infant and family observations and mindfulness experiences as applied to students' work with infants, young children and families. Explore and experience ways in which reflective practices may be applied to parent-infant/early childhood mental health. Learn mindfulness strategies for developing self-awareness and regulation that may be brought to their work with families of infants and young children. In small Reflective Mentoring Groups, students will experience both descriptive and in-vivo examples of reflective practice through case based presentations, deeper introspection and supportive discussion to increase clarity and engagement in work with families of young children. Consider boundaries and ethical decision making related to the dilemmas faced by professionals working with families during the perinatal period and in early childhood, especially those in high risk and challenging circumstances.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**PSYCHIAT 714 – CONSULTATION IN INFANT, EARLY CHILDHOOD AND FAMILY MENTAL HEALTH: ADVANCED CLINICAL PRACTICE I**  
1 credit.

This small group and individualized course offers students an opportunity to reflect upon their work with mothers and partners in the prenatal and postpartum period, infants, young children and their families. Course faculty and a senior, clinical consultant will guide students in exploring their individual responses to the literature, course content and issues raised in their work including personal experience and reactions as well reflecting on the parallel process. The intent is to support the student's professional development in ways that broaden and deepen the effectiveness of their work.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCHIAT 715 – THERAPEUTIC INTERVENTIONS, PRACTICES AND POLICY IN INFANT, EARLY CHILDHOOD AND FAMILY MENTAL HEALTH**  
3 credits.

Offers students the opportunity to apply knowledge of Infant, Early Childhood and Family Mental Health concepts, assessment and diagnosis to planning and implementation of relationship-based and individual treatment approaches as well as to program development and policy. Students will be introduced to best practices and evidence based multi-disciplinary treatment approaches to address a range of presenting issues, settings, and cultural contexts for vulnerable children who are evidencing social, emotional, behavioral or attentional disturbances and parents with psychiatric disorders. Implications for informing policy across systems of care will be addressed. During the course of the semester, students will benefit from invited state and national speakers and guest faculty and instructors from the UW speaking on their areas of expertise.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCHIAT 716 – SEMINAR IN REFLECTIVE PRACTICES AND MINDFULNESS IN INFANT, EARLY CHILDHOOD AND FAMILY MENTAL HEALTH II**  
2 credits.

Continued advancement in reflective practices through case discussion, infant and family observations, mindfulness and self-compassion experiences as applied to their work with infants, young children and families. Additional strategies and in-depth opportunities for introspection and self-awareness. Discussion of relationship-based therapeutic consultation and interventions and attention to the parallel process between the nature of their relationship with a parent and the parent's relationship with their child. Focus will be on underserved populations and contribution of maternal depression, substance abuse disorders and trauma on the parent-child relationship and the child's development. Complex ethical decision making and policy issues will be addressed. Inclusion of a self-assessment process that will support students in appraising their competencies and readiness to apply for the WI Alliance for Infant Mental Health Endorsement.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCHIAT 717 – CONSULTATION IN INFANT, EARLY CHILDHOOD AND FAMILY MENTAL HEALTH: ADVANCED CLINICAL PRACTICE II**  
1 credit.

This small group and individualized course offers students an opportunity to reflect upon their work with mothers and partners in the prenatal and postpartum period, infants, young children and their families. Course faculty and a senior, clinical consultant will guide students in exploring their individual responses to the literature, course content and issues raised in their work including personal experience and reactions as well reflecting on the parallel process. The intent is to support the student's professional development in ways that broaden and deepen the effectiveness of their work.

**Requisites:** Declared in Infant, Early Childhood, and Family Mental Health Capstone Certificate

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCHIAT 901 – SPORTS PSYCHIATRY: IMPROVING THE MENTAL HEALTH OF ATHLETES AT THE INDIVIDUAL AND SYSTEMS LEVELS**

2 credits.

Improve skills in providing psychiatric health care to athlete populations. Sports psychiatry as a sub-specialty within psychiatry focuses on diagnosis and treatment of psychiatric illness in athletes. While utilization of psychological approaches to enhance performance can be part of the work of the sports psychiatrist, the emphasis is more on addressing actual mental illness in this population. Sports psychiatry may also involve the use of exercise as a therapeutic or preventative intervention for mental illness. Sports psychiatry typically focuses on mental health care for individual athletes, but systems-wide initiatives (e.g., at the level of the team or university) are also often important.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCHIAT 902 – THE BASIC SCIENCE OF SLEEP AND CONSCIOUSNESS**

2 credits.

Sleep occupies a third of our life, and is found in all animal species. Loss of sleep has both acute and long-term negative consequences on the brain and the body. Still, why we sleep remains unclear, and hypotheses on the role of sleep for synaptic homeostasis, learning and memory, cardiovascular and metabolic health, are being tested in humans and animal models. Learn how the sleeping brain can either support vivid conscious experiences (dreaming) or not (deep slow wave sleep); brain structures involved in wake and sleep; how sleep pressure increases during waking; effects of sleep deprivation; causes of narcolepsy and other sleep disorders. How to study sleep in genetic models like flies; electron microscopy to assess effects of sleep loss on synapses; enhancement of sleep slow waves in humans; development and testing of theoretical models; methods to assess levels of consciousness in humans. During time at the WI Sleep Clinic, learn how sleep disorders are diagnosed and treated.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCHIAT 910 – PSYCHIATRY INDEPENDENT READING AND RESEARCH ELECTIVE**

1-12 credits.

Independent exposure to research methodology as it pertains to psychiatry and/or affective neuroscience.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCHIAT 919 – PSYCHIATRY INDIVIDUALIZED CLINICAL ELECTIVE**

1-12 credits.

Develop a customized experience with relevant faculty not offered by our already established electives.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCHIAT 921 – BEHAVIORAL HEALTH CLINICAL ELECTIVE**

1-12 credits.

Behavioral medicine clinical patient care, under faculty supervision. All members of the department interact with the student who is typically assigned primarily to one member, depending upon the student's interests. Spend time with the Psychiatric Unit nursing staff to learn how the Unit itself is used as a treatment modality.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCHIAT 922 – PSYCHIATRY CONSULTATION AND LIAISON CLINICAL ELECTIVE**

1-12 credits.

Learn psychiatric assessment of patients admitted to University Hospital medical and surgical floors (including burn unit, trauma service and transplant services). Learn emergency psychiatric assessment through consultation to the University Hospital emergency department.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCHIAT 925 – COMMUNITY PSYCHIATRY ELECTIVE**

2-4 credits.

Immersive experience in community mental health while embedded within a community support team, either at Gateway or Community Treatment Alternatives (CTA). Gateway is an assertive community treatment team serving Dane County residents who have severe mental illness and substance abuse issues. CTA is an assertive community treatment team that works exclusively with adults involved in the criminal justice system. Patients must be either diverted from the Dane County Jail or be conditionally released after being found "not guilty by reason of mental disease or defect" (NGI).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 6 number of completions**Last Taught:** Spring 2023



**PSYCHIAT 930 – PSYCHIATRY GERIATRIC CLINICAL ELECTIVE**

1-12 credits.

Care of older adults with mental illness, including late-life depression and anxiety, suicidality, dementia, and substance use disorders. Under the supervision of clinicians with extensive experience in the care of older adults, help care for patients in inpatient, outpatient and long-term care settings. Have the opportunity to experience public health approaches to improving the mental health of older adults, for example, by attending caregiver support groups.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCHIAT 931 – DEMENTIA AND PUBLIC HEALTH**

2-4 credits.

Clinical care of persons living with dementia and their caregivers. Public health approaches to assisting persons living with dementia in the community via Wisconsin Alzheimer's Institute. Assessment and management of dementia, including behavioral and psychological symptoms.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCHIAT 932 – PSYCHIATRY ADDICTION CLINICAL ELECTIVE**

1-12 credits.

Etiology, assessment, and treatment of substance use disorders and psychiatric co-morbidity.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCHIAT 933 – PUBLIC HEALTH ADVOCACY AND SERVICE IN PSYCHIATRY**

2 credits.

Broad set of experiences in public health service and public health advocacy, and exposure to a number of community resources and organizations. Spend time within a mental health integrated care setting under faculty supervision. These models of care have been shown to be cost-effective ways of delivering mental health care to large numbers of patients, thereby addressing a public health need given the serious shortage of Psychiatrists. Work with the Wisconsin Medical Society to receive media training and write and record a public service announcement on a Psychiatric public health issue. Receive Advocacy training. Attend meetings of local professional advocacy organizations (e.g., the Wisconsin Medical Society, Dane County Medical Society) with the Course Director, dependent on time of enrollment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PSYCHIAT 934 – PSYCHIATRY INPATIENT CLINICAL ELECTIVE**

2-4 credits.

Introduction to common psychiatric diagnoses (mood disorders, psychotic disorders and personality disorders) in the hospital setting. Actively participate in patient care under the supervision of 2 Inpatient Attending Faculty and 3 Psychiatry Residents. During daily multidisciplinary rounds, present detailed clinical information about new patients. Provide updates on the patients you are following. Each student is assigned 2 or 3 patients. You are included in all aspects of patients' care and have ample time for in-depth interviews. Attend family meetings and play an integral role in obtaining collateral information from family or outside sources. Daily progress notes are reviewed by attendings and residents.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCHIAT 946 – CHILD AND ADOLESCENT PSYCHIATRY CLINICAL ELECTIVE**

1-12 credits.

Introduction to core knowledge and skills in child and adolescent psychiatry including assessment, diagnoses, and treatment of children and adolescents through exposure to inpatient, outpatient, and consultation/liaison settings. Exposure to the intricacies of working with families and systems providing care to child and adolescent patients. Designed for students considering careers in psychiatry, pediatrics, and family practice.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCHIAT 947 – PSYCHIATRY ASSESSMENT & TREATMENT IN A FORENSIC HOSPITAL SETTING**

4 credits.

Interact with and learn from multiple staff at Mendota Mental Health Institute (MMHI), including forensic psychiatrists, psychologists, nurses, and occupational therapists. Interact with patients who have been committed to MMHI usually for forensic purposes- the patient has been found not guilty by reason of insanity, they are incompetent to stand trial, and/or their conditional release in the community has been revoked. Opportunity to see patients who have been civilly committed. Rotate with multiple psychiatrists, some of whom are specially trained in forensic psychiatry. Learn more about the forensic/legal system, the structure of medium and maximum security forensic psychiatry units, treatment of refractory psychotic and mood disorders, and the basics of forensic assessments. The student is given as much autonomy as possible with individual supervision and discussion.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Fall 2022

## PSYCHOLOGY (PSYCH)

### PSYCH/ASIAN/COUN PSY/ED PSYCH 120 – THE ART AND SCIENCE OF HUMAN FLOURISHING

3 credits.

Explore perspectives related to human flourishing from the sciences and humanities; investigate themes such as transformation, resilience, compassion, diversity, gratitude, community; expand self-awareness, enhanced social connectivity, and ability to change; formulate a sense of what it means to lead a flourishing life that sustains meaningful and fulfilling engagement with studies, relationships, community, and career.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### PSYCH/SOC 160 – HUMAN SEXUALITY: SOCIAL AND PSYCHOLOGICAL ISSUES

3–4 credits.

Biological, psychological and sociological aspects of sexual relationships and behavior. Presents theoretical and empirical materials on sexuality throughout the life-course, including childhood, adolescence, adulthood, and later life. Attention is given to gender, religion, education and the law as they relate to sexual expression in society.

**Requisites:** Not open to students with credit for PSYCH/SOC/ PSYCH 453 (or PSYCH/SOC 350 prior to spring 2018)

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PSYCH 202 – INTRODUCTION TO PSYCHOLOGY

3–4 credits.

Behavior, including its development, motivation, frustrations, emotion, intelligence, learning, forgetting, personality, language, thinking, and social behavior.

**Requisites:** Not open to students with credit for PSYCH 201 or 281

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PSYCH 205 – EXPLORING RESEARCH IN PSYCHOLOGY

1 credit.

Focuses on a wide range of research in psychology at UW-Madison, such as child development, clinical psychology, perception, biological psychology, cognition, and psychological neuroscience.

**Requisites:** PSYCH 202

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### PSYCH 210 – BASIC STATISTICS FOR PSYCHOLOGY

3 credits.

Measures of central tendency, variability; probability, sampling distributions; hypothesis testing, confidence intervals; t-tests; Chi-square; regression and correlation (linear) and introduction to analysis of variance (1-way).

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and (PSYCH 202 or concurrent enrollment)

**Course Designation:** Gen Ed – Quantitative Reasoning Part B Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PSYCH 211 – FRESHMAN SEMINAR IN PSYCHOLOGY

3 credits.

Topics that introduce research methods, theories, findings and current controversies in a focused area of psychology.

**Requisites:** None

**Course Designation:** Breadth – Natural Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

### PSYCH 225 – RESEARCH METHODS

4 credits.

General characteristics of scientific method; use of experimental, observational, and correlational research designs; research methods used in psychological science; illustration of core issues in research methods taken from several areas of psychology; lecture, demonstration, and experiments.

**Requisites:** Satisfied Communications A requirement, grade of C in PSYCH 202, and grade of C in (PSYCH 210, STAT 302, STAT 324 or STAT 371)

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### PSYCH 310 – TOPICS IN PSYCHOLOGY: STUDY ABROAD

1–6 credits.

A course carried with a UW-Madison Study Abroad Program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 1999

**PSYCH 311 – ISSUES IN PSYCHOLOGY**

1-4 credits.

Topics vary with the instructor. Survey of topical issues.

**Requisites:** PSYCH 202**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH/GEN&WS 322 – SEXUAL & RELATIONSHIP VIOLENCE RESEARCH & ACTIVISM**

3 credits.

Examine sexual and relationship violence and how they intersect with various aspects of identity (race, gender, sexual orientation, disability, poverty, etc.) in the general community as well as within particular populations (college, military, incarcerated) with a heavy focus on college populations (some of the applied parts of the course will focus here). Learn about power and oppression, as well as ways that both research and practice in these arenas have been marginalized and underfunded. Additional focus on community and campus responses to sexual and relationship violence through a series of speakers as well as about anti-violence activism through course activities and group projects.

**Requisites:** Junior standing and 3 credits in PSYCH or GENWS**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**PSYCH/I SY E 349 – INTRODUCTION TO HUMAN FACTORS**

3 credits.

Conveys the importance of considering human capabilities and limits in system design and operation. This includes understanding human characteristics from the cognitive, physical, and psychosocial perspectives. Implications of these characteristics are explored through understanding the needs of people, designing to support these needs, and evaluating systems to ensure they serve the intended purpose. Case studies are used to identify the human role in accidents and to identify design improvements. Application domains include consumer product design, human-computer interaction, workplace safety, and complex systems such as healthcare delivery.

**Requisites:** (I SY E 210, E C E 331, STAT/MATH/STAT 309, 431, STAT 311, 324, 371, MATH 531, PSYCH 210, or SOC/C&E SOC/SOC 360, or concurrent registration), graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PSYCH 380 – JUNIOR HONORS SEMINAR**

1 credit.

Discusses the process of research, provide guidance and feedback about writing about research, and offer opportunities to present research issues and findings. The broader goal is to prepare students to conduct a Senior Honors Thesis.

**Requisites:** PSYCH 225 and declared in a College of Letters and Science Honors in the Liberal Arts program or Psychology Honors in the Major

**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH 399 – SERVICE LEARNING IN PSYCHOLOGY**

1-4 credits.

An independent opportunity to provide experience in community service work relevant to psychology.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH 401 – PSYCHOLOGY, LAW, AND SOCIAL POLICY**

3 credits.

Focuses on the role that psychological principles, research evidence and social science play in the laws of U.S. society, especially in the policies and mechanisms of social control of human behavior. Topics include: the ways society defines membership; the role of psychology determining who should be excluded or restricted from open society; how selected processes work in the legal and social context; students' own roles as citizens in supporting or changing these social processes; clinical-legal processes used to determine the disposition of individuals considered marginal in society; mechanisms used to exclude individuals from open society through criminal and civil court processes; the role of psychology as a science; and the role of psychologists as behavioral experts in criminal and civil courts, and in shaping social policies.

**Requisites:** PSYCH 202**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH 403 – PSYCHOLOGY OF PERSONALITY**

3 credits.

Organization and development of the personality.

**Requisites:** PSYCH 202**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PSYCH 405 – ABNORMAL PSYCHOLOGY**

3-4 credits.

Introduces diagnosis and treatment of major mental disorders. Considers current thinking regarding the biological, psychological, and sociocultural factors that play contributing roles in the etiology and maintenance of these disorders. Historical trends as well as advances in neuroscience will be considered in terms of how they have affected our understanding of psychopathology.

**Requisites:** PSYCH 202**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PSYCH 406 – PSYCHOLOGY OF PERCEPTION**

3-4 credits.

Survey the current knowledge about how the brain creates our conscious experience of a surrounding world and of our own bodies. Consider contributions from various approaches, including neurophysiology, psychophysics, computer simulations, perceptual illusions, and patient studies.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**PSYCH 412 – FIELD EXPERIENCE IN PSYCHOLOGY**

3 credits.

Practical experience in the application of psychology in an organization serving social, mental health, educational, biological psychology, developmental, or industrial/organizational interests. Readings and discussions in the application of psychology will be required. Completion of PSYCH 225 required before enrolling.

**Requisites:** Consent of instructor**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**PSYCH 413 – LANGUAGE, MIND, AND BRAIN**

3-4 credits.

Cognitive processes and brain mechanisms underlying language use.

Topics include language acquisition, production, comprehension, bilingualism, human vs. computer speech perception, reading and dyslexia, human language vs. animal communication, aphasia and other language impairments, and the relationship between language and thought.

**Requisites:** PSYCH 202, CS&D 110, LINGUIS 101, or ANTHRO/LINGUIS/ANTHRO 301**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**PSYCH 414 – COGNITIVE PSYCHOLOGY**

3-4 credits.

How people perceive, learn, remember, plan, solve problems, make decisions, and communicate. The main approach is psychological but will also consider contributions from computer science, linguistics, and neurobiology.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH 428 – INTRODUCTION TO CULTURAL PSYCHOLOGY**

3-4 credits.

Cultural underpinning of psychological processes. Covers cultural influences on a wide range of psychological processes, including self-perception, motivation, relationship, cognition and perception, and will also deal with acculturation, within-cultural differences and cultural stability and change.

**Requisites:** PSYCH 202**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**PSYCH 449 – ANIMAL BEHAVIOR**

3-4 credits.

Evolutionary and physiological mechanisms of animal behavior including aggressive, reproductive, communicative, and social behaviors, behavioral development.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

### **PSYCH 450 – PRIMATES AND US: INSIGHTS INTO HUMAN BIOLOGY AND BEHAVIOR**

3 credits.

Evolution from monkey to humans of intelligence, social behavior, emotion, growth, and bodily structure.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH/SOC 453 – HUMAN SEXUALITY**

4 credits.

Provides an interdisciplinary introduction to biological, psychological, and sociological aspects of human sexuality.

**Requisites:** PSYCH 202 or Sophomore standing. Not open to student with credit for PSYCH/SOC/PSYCH 160

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **PSYCH 454 – BEHAVIORAL NEUROSCIENCE**

3-4 credits.

Biological basis of human and animal behaviors, including perception, action, cognition, social interaction and disease. Weekly themes from "Cracking the Neural Code" to "Love and War". Learn, develop and use neural mechanisms to explain and (attempt to) predict what they and others think and do in all facets of life.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH 456 – SOCIAL PSYCHOLOGY**

3-4 credits.

Introduce classic and contemporary theories and research in the field, with an emphasis on experimental methodology. Examine the psychological study of the individual in the social world, including social interaction, motivation, attitudes, conformity, communication, leadership, personal relationships, and behavior in small groups.

**Requisites:** PSYCH 202

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH 460 – CHILD DEVELOPMENT**

3-4 credits.

Biological and behavioral foundations of human development, with an emphasis on experiments and data-driven approaches. Topics will include prenatal development, behavior genetics, motor development, perceptual development, language development, cognitive development, emotional development, social development, and atypical development.

**Requisites:** PSYCH 202

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH 464 – ADULT DEVELOPMENT AND AGING**

3 credits.

Physical, cognitive, social, and personality development during the adult years.

**Requisites:** PSYCH 202

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH 501 – DEPTH TOPIC IN SOCIAL SCIENCE**

4 credits.

Provides an in-depth treatment of a specific topic in psychology.

**Requisites:** PSYCH 202

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PSYCH 502 – COGNITIVE DEVELOPMENT**

4 credits.

Covers the basics of cognitive development during childhood. Topics include theoretical approaches to cognitive development; perceptual, language, memory, and conceptual development; social cognition; problem solving, and academic performance.

**Requisites:** PSYCH 406, 413, 414, or 460

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PSYCH 503 – SOCIAL DEVELOPMENT**

4 credits.

Explores how infants and children perceive, think about, and interact with the social world. Topics include theory of mind, emotions, early social relationships, peer influences, morality and pro-social behavior, aggression, and social categorization.

**Requisites:** PSYCH 414, 428, 449, 450, 456, or 460

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**PSYCH 505 – DEPTH TOPIC IN BIOLOGICAL SCIENCE**

3-4 credits.

Provides an in-depth treatment of a specific topic in psychology and biology.

**Requisites:** PSYCH 202, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or (BIOCORE 381 and 382)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**PSYCH 508 – PSYCHOLOGY OF HUMAN EMOTIONS: FROM BIOLOGY TO CULTURE**

4 credits.

Emotional experience affects and defines every facet of our life, but it seems mysterious and unsuitable for scientific inquiry. Explore how and why emotion is not unsuited to scientific research and provides an in-depth examination of research from all sub-disciplines of the field of Psychology. This includes neuroscience and the biological bases of behavior, questions of the developmental curve for emotional phenomena and the relationship between feeling and thinking, and the study of social groups and culture. Readings and discussion attempt to integrate existent theory and research and apply their implications to the individual, the group, and society.

**Requisites:** PSYCH 403, 428, 456, 460, or PSYCH/SOC/PSYCH 453, or GENWS/PSYCH/GEN&WS 522

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH 510 – CRITICAL ISSUES IN CHILD PSYCHOPATHOLOGY**

4 credits.

Provides in-depth coverage on the study of common mental disorders of childhood and adolescence. Uses a scientific lens to dive into some of the more controversial issues in the field, rather than focusing on basic definitions and classifications, instead. For instance, what factors have led to the rise in ADHD diagnosis in this country, and around the world? Why aren't evidenced-based treatments more widely used in mental health settings? Are antidepressants safe for adolescents, and do they actually work?

**Requisites:** PSYCH 405 or 460 (or PSYCH 509 or 560 prior to Fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH 511 – BEHAVIOR PATHOLOGY: NEUROSES**

3 credits.

The nature, origins, assessment and treatment of neurotic, characterological, and psychosomatic behavioral abnormalities and psychopathology in adults and children.

**Requisites:** PSYCH 202; Not open to students with credit for PSYCH 405

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**PSYCH 513 – HORMONES, BRAIN, AND BEHAVIOR**

4 credits.

Complex social behavior emerges from the interplay of hormones, the brain and environmental signals. Introduces how hormones and neurotransmitters shape brain and behavior in animals and humans. Review the mechanisms by which hormones shape brain sex differences and its consequences on juvenile (i.e. play) and adult behavior. Examine how hormones influence sexual behavior using basic animal models, and extend this to human sex differences, including sexual orientation. Additional topics include how hormones shape competitive and affiliative behaviors, eating disorders, and stress and mental health, as well as how individual variation occurs in response to the changing environment and genetic landscape, including epigenetics at an introductory level.

**Requisites:** PSYCH 406, 413, 414, 449, 450, 454, or PSYCH/ZOOLOGY/PSYCH 523

**Course Designation:** Breadth - Either Biological Science or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **PSYCH 520 – HOW WE READ: THE SCIENCE OF READING AND ITS EDUCATIONAL IMPLICATIONS**

4 credits.

Reading is one of the most advanced expressions of human intelligence, involving language, vision, memory, learning, thinking and other capacities. This course is an in-depth introduction to scientific studies of reading, which examine how reading relates to spoken language, how people learn to read, the processes involved in skilled reading, the causes of reading impairments (dyslexia), and the brain bases of reading. The course will also examine whether this science can help to address America's literacy problem. Many people (about 30% of the population) are unable to read or read poorly. How can reading science be brought to bear on this problem, which is of enormous importance to both the affected individuals and society?

**Requisites:** PSYCH 406, 413, 414, or 460

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **PSYCH 521 – THE STRUCTURE OF HUMAN THOUGHT: CONCEPTS, LANGUAGE AND CULTURE**

4 credits.

Topics include the relationship of language to other cognitive and perceptual functions; language evolution; the connection of language and culture, sources of linguistic diversity; linguistic engineering; the role of information technologies in the spread of ideas and its impact on language change. Will draw heavily on empirical research in cognitive and developmental psychology, and to a lesser extent on cognitive neuroscience, animal cognition, anthropology, and linguistics.

**Requisites:** PSYCH 406, 413, 414, or 460

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH/GEN&WS 522 – PSYCHOLOGY OF WOMEN AND GENDER**

3 credits.

Examination of theories and research on the psychology of women and gender. Explores topics such as sex bias in psychological research; psychological aspects of female sexuality and reproduction; gender-based violence; female achievement and power; lifestyle choices of women; women and mental health; and psychological research with transgender individuals.

**Requisites:** Sophomore standing, a course in PSYCH and (GEN&WS 102 or 103) or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PSYCH/ZOOLOGY 523 – NEUROBIOLOGY**

3 credits.

Basic mechanisms in cellular neurophysiology: electrophysiology and chemistry of nerve signals, mechanisms in integration, simple nervous pathways and their behavioral correlates.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/ZOOLOGY/BIOLOGY 101, or BIOCORE 485) and (CHEM 104, CHEM 109, or CHEM 116)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PSYCH 525 – COGNITION IN HEALTH AND SOCIETY**

4 credits.

Topics from cognitive psychology shed light on current issues in health and society. Topics include attention, memory, categorization, reasoning, decision making and problem solving. Issues include distracted driving, traumatic brain injuries, anxiety, dementia, eyewitness testimony, stereotype, and individual differences (e.g., autism spectrum disorders and expertise). It will focus on how experimental results and formal theories from each topic can be applied to understand current issues better and improve people's lives.

**Requisites:** PSYCH 403, 405, 406, 413, 414, 428, 449, 450, 454, 456, 460, 464, PSYCH/SOC/PSYCH 453, GENWS/PSYCH/GEN&WS 522, or PSYCH/ZOOLOGY/PSYCH 523

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **PSYCH 526 – THE CRIMINAL MIND: FORENSIC AND PSYCHOBIOLOGICAL PERSPECTIVES**

4 credits.

Criminal behavior is an extremely common and costly problem for society. The goal of the course is to provide an indepth understanding of criminal psychology and the relevant forensic and psychobiological processes in the field.

**Requisites:** PSYCH 403, 405, or 456

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 532 – PSYCHOLOGICAL EFFECTS OF THE INTERNET**

4 credits.

Googling the question, "How is the Internet changing the way we think?" renders no shortage of opinions – or fears. Examine empirical evidence for whether the Internet is changing the way we learn, communicate, socialize, attend, develop, and age. Read and synthesize original research literature, which will be augmented with readings and videos from the popular press.

**Requisites:** PSYCH 403, 405, 406, 413, 414, 428, 449, 450, 454, 456, 460, 464, PSYCH/SOC/PSYCH 453, GENWS/PSYCH/GEN&WS 522, or PSYCH/ZOOLOGY/PSYCH 523

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH/I SY E 549 – HUMAN FACTORS ENGINEERING**

3 credits.

Analysis and design of man-machine systems using human performance models and data. Emphasis on systems involving communication and control. Projects using digital and analog computer simulation techniques for system design.

**Requisites:** I SY E/PSYCH 349, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH 601 – CURRENT TOPICS IN PSYCHOLOGY**

3 credits.

Special topics in Psychology at the advanced undergraduate level. May be repeated for credit with different titles.

**Requisites:** PSYCH 225

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 602 – INTERMEDIATE STATISTICS FOR PSYCHOLOGY**

3 credits.

Principles of psychological measurement and test theory, including reliability, validity, and test construction. Introduction to correlation, multiple regression, factor analysis, and other data analytic principles.

**Requisites:** PSYCH 210, CE SOC/SOC/C&E SOC 360, STAT 371, or GEN BUS 303

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**PSYCH 603 – EPIGENETICS AND THE BRAIN**

3 credits.

Explore nature versus nurture by understanding gene by environmental interactions. Study how the environment and our behavior can modify our genome (epigenetics). Focus on how our behavior and overall health can be shaped by markings on our DNA, and how these markings may be passed onto future generations.

**Requisites:** (PSYCH 454 or PSYCH/ZOOLOGY/PSYCH 523) and BIOLOGY/ZOOLOGY/BOTANY/BIOLOGY/ZOOLOGY 152, PSYCH 225, or (BIOCORE 383 and 384)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PSYCH 606 – HORMONES AND BEHAVIOR**

3 credits.

A survey of human and subhuman research findings relating behavioral events to endocrine function. Topics include stress, psychosis, intellectual development, memory, gender-identity differentiation, reproductive behavior, aggression, preceded by a review of basic and clinical endocrinology.

**Requisites:** PSYCH 225 and 454

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**PSYCH 607 – INTRODUCTION TO PSYCHOTHERAPY**

3 credits.

Theoretical and applied foundations of psychotherapy. Consider issues of ethics, diversity/inclusivity, and research directions related to psychotherapy. Explore basic and theoretical considerations relevant to therapy including transference and countertransference, emotion, defense mechanisms, boundaries, resistance and early development. Discuss aspects of psychotherapy practice including trauma work, parenting issues, play therapy, family therapy, and couples therapy.

**Requisites:** PSYCH 225

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 610 – DESIGN AND ANALYSIS OF PSYCHOLOGICAL EXPERIMENTS I**

4 credits.

Reliability, validity, one-sample t-test, independent-samples t-test, simple and multiple regression, effect size indicators, analysis of variance (ANOVA), analysis of covariance (ANCOVA), case analysis, model assumptions, transformations, polynomial regression, simple mediation, and moderated mediation.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH/NEURODPT/NTP 611 – SYSTEMS NEUROSCIENCE**

4 credits.

Introduction to the anatomy and physiology of the mammalian nervous system. Lectures will cover the neuroanatomy of the major subdivisions of the human brain, the major sensory and motor systems, and higher order functions. Lab/discussion sections will emphasize readings from the primary literature and hands-on dissections.

**Requisites:** NTP/NEURODPT/NTP 610 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 612 – NEUROPHARMACOLOGY**

3 credits.

Comprehensive review of the field of behavioral neuropharmacology, focusing on methodology, major neurotransmitter systems, critical evaluation of experimental evidence regarding behavioral functions of these transmitter systems and drugs used to treat mental illness.

**Requisites:** (PSYCH 454 or PSYCH/ZOOLOGY/PSYCH 523) and BIOLOGY/ZOOLOGY/BOTANY/BIOLOGY/ZOOLOGY 152, PSYCH 225, or (BIOCORE 383 and 384)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH/ANTHRO/NTP/ZOOLOGY 619 – BIOLOGY OF MIND**

3 credits.

Origins and structures of mind, brain, and consciousness. Transitions from early mammalian through primate to hominid intelligence. Genetics and plasticity in brain development. Modern studies of human brain mechanisms and consciousness.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**PSYCH 620 – CAPSTONE MENTORED RESEARCH AND SEMINAR**

1-6 credits.

Develop an understanding of primary research in a topic area and participate in designing and conducting research that challenges and/or extends current understanding of the topic. Course reading will include published research studies relevant to the selected topic.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**PSYCH 621 – MENTORED RESEARCH AND SEMINAR**

1-6 credits.

Develop an understanding of primary research in a topic area and participate in designing and conducting research that challenges and/or extends current understanding of the topic. Course reading will include published research studies relevant to the selected topic.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH/I SY E 653 – ORGANIZATION AND JOB DESIGN**

3 credits.

Design of productive organizations and people's roles within them. Issues including boundary location, organizational decision levels, autonomous work groups, implementation and diffusion. Roles of the union. Case studies.

**Requisites:** I SY E/PSYCH 349, graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PSYCH/NEURODPT/ZOOLOGY 674 – BEHAVIORAL NEUROENDOCRINOLOGY SEMINAR**

2 credits.

Behavior results from a complex interplay among hormones, the brain, and environmental factors. Behaviors and their underlying neural substrates have evolved in response to specific environmental conditions, resulting in vast species diversity in behavioral and neuroendocrine solutions to environmental problems. Designed to explore the primary literature on the neuroendocrine underpinnings of behavior spanning from feeding to sex differences in complex social behaviors. A range of taxonomic groups will be discussed, including (but not limited to) mammals, birds, and fish.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PSYCH 681 – SENIOR HONORS THESIS**

3 credits.

Individual study for students completing senior honors theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 682 – SENIOR HONORS THESIS**

3 credits.

Individual study for students completing senior honors theses as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 686 – SENIOR THESIS SEMINAR IN PSYCHOLOGY**

1 credit.

Focus on the process of conducting, writing, and presenting a senior or honors thesis in Psychology. Discuss the process of research, provide guidance and feedback about writing about research, and offer opportunities to present research issues and findings.

**Requisites:** Concurrent enrollment in PSYCH 681, 682, 691, or 692

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 691 – UNDERGRADUATE THESIS**

1-6 credits.

Undergraduate research including completion of a thesis. Recommended for those intending to do graduate work in psychology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 692 – UNDERGRADUATE THESIS**

1-6 credits.

Undergraduate research including completion of a thesis. Recommended for those intending to do graduate work in psychology.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 693 – ANIMAL BEHAVIOR PROBLEMS**

1-12 credits.

Individual experimental studies.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**PSYCH 695 – PROBLEMS IN CLINICAL PSYCHOLOGY**

1-12 credits.

Individual experimental studies.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**PSYCH 697 – PROBLEMS IN HUMAN BEHAVIOR**

1-12 credits.

Independent work under supervision.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**PSYCH 699 – DIRECTED STUDY**

1-3 credits.

Independent mentored study with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 701 – PROSEMINAR IN EXPERIMENTAL PSYCHOLOGY**

1 credit.

Introductions to various aspects of experimental psychology such as sensory, learning, motivation, and experimental methodology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 703 – PROSEMINAR IN SOCIAL PSYCHOLOGY**

1 credit.

Discussion of current topics in social psychology, especially as illustrated by the planned and ongoing research of the graduate students and faculty in social psychology. Recent journal articles will also be discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 704 – PROSEMINAR IN CLINICAL PSYCHOLOGY**

1 credit.

Research and theoretical presentations by all class members as well as discussions and research critiques. Discussion of research articles.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 706 – PROSEMINAR IN DEVELOPMENTAL PSYCHOLOGY**

1 credit.

Discussion of current topics in developmental psychology, especially as illustrated by the planned and ongoing research of the graduate students and faculty in developmental psychology. Recent journal articles will also be discussed.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 707 – PROSEMINAR IN BIOLOGICAL PSYCHOLOGY (PERCEPTION/BIOLOGY OF BRAIN & BEHAVIOR)**

1 credit.

Topical research-oriented presentations and discussions in the area of biological psychology. Each week the seminar will be led by a faculty member or advanced student in the biological psychology area group of the Department of Psychology.

**Requisites:** Declared in Psychology PhD program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 709 – PROSEMINAR IN DATA SCIENCE IN HUMAN BEHAVIOR**

1 credit.

Discussion of current topics in human behavioral data science, including discussion of planned capstone projects, discussion of recent journal articles, training and practice in scientific communication to various stakeholders, and professional development activities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 710 – DESIGN AND ANALYSIS OF PSYCHOLOGICAL EXPERIMENTS II**

4 credits.

Statistical power, paired-samples t-test, within-subjects ANOVA, mixed models, mediation in within-subjects designs, contrast analysis (= the analysis of categorical predictors with 3 or more levels), multilevel modeling, linear mixed-effects models, restricted maximum likelihood, signal detection theory, logistic regression, exploratory factor analysis, missing data.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 711 – CURRENT TOPICS IN PSYCHOLOGY**

2-3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 720 – ESSENTIALS OF COGNITIVE NEUROSCIENCE**

3 credits.

Provides a broad overview of principles that underlie our understanding of how the structure and function of the brain give rise to cognition and intelligent behavior, and of the methods with which cognitive neuroscience research is carried out. The content covered can be summarized as neuroscience with direct implications for understanding the neural bases of human behavior, and will include anatomical, cellular, systems, behavioral, neuropsychological, and computational levels of analysis. The emphasis will be on domains of behavior traditionally covered by cognitive psychology and neurology, but with explicit consideration, when applicable, of implications for understanding affect, social behavior, and psychopathology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**PSYCH 728 – CLASSIC ISSUES IN SOCIAL PSYCHOLOGY**

3 credits.

A broad survey of theories and research from the field of social psychology. Areas may include: attitudes and attitude change, conformity and compliance, altruism, attribution theory.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH/COUN PSY/RP & SE 729 – ADVANCED SOCIAL PSYCHOLOGY**

3 credits.

Intensive examination of theoretical conceptions in contemporary social psychology, including learning-theoretic, reinforcement, incentive, cognitive, and psychodynamic approaches, and research in selected topic areas reflecting these approaches, such as aggression, attitude formation and change, conformity, limitation and modeling, interpersonal attraction, perception of others, prosocial behavior, and social influence.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**PSYCH 733 – PERCEPTUAL AND COGNITIVE SCIENCES**

2 credits.

Current approaches to perceptual and cognitive sciences.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**PSYCH 740 – CLINICAL I: ASSESSMENT, ETIOLOGY, AND TREATMENT**

1 credit.

Current approaches to assessment, etiology, and treatment of topic material.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH 741 – CLINICAL II: ASSESSMENT, ETIOLOGY, AND TREATMENT**

1 credit.

Current approaches to assessment, etiology and treatment of topic material.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PSYCH 750 – PROGRAMMING FOR HUMAN BEHAVIORAL DATA SCIENCE**

3 credits.

Foundations in programming fundamentals, emphasizing tools and techniques as utilized in human behavioral data science.

**Requisites:** Declared in Psychology: Human Behavioral Data Science MS or Psychology PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH 752 – APPLIED MACHINE LEARNING FOR BEHAVIORAL DATA SCIENCE**

3 credits.

Introduction to computational approaches in machine learning for the behavioral sciences.

**Requisites:** PSYCH 610 and graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PSYCH 755 – ENVIRONMENTS AND TOOLS FOR LARGE-SCALE BEHAVIORAL DATA SCIENCE**

3 credits.

Provides students with knowledge and experience conducting large-scale behavioral data science projects, independently and in collaboration with others, using a variety of contemporary software tools and environments.

**Requisites:** PSYCH 750 and 752**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**PSYCH/COMP SCI/ED PSYCH 770 – HUMAN-COMPUTER INTERACTION**

3 credits.

Principles of human-computer interaction (HCI); human subjects research methods and procedures, qualitative and quantitative data analysis; and semester-long research project situated in critical domains of HCI, including applications in ubiquitous, affective, assistive, social, and embodied computing.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH 776 – TEACHING OF PSYCHOLOGY**

1-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2018**PSYCH 790 – CAPSTONE I**

5 credits.

Preparation for the applied capstone project, including identifying the project primary literature, relevant tools, and software and communicating these ideas and plans to relevant stakeholders.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No



**PSYCH 791 – CAPSTONE II**

3 credits.

Conduct applied capstone project, including identifying the project primary literature, relevant tools, and software and communicating these ideas and plans to relevant stakeholders.

**Requisites:** PSYCH 790

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**PSYCH 799 – INDEPENDENT READING**

2-3 credits.

Directed study projects for graduate students as arranged with faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**PSYCH 800 – COGNITIVE & NEUROPSYCHOLOGICAL ASSESSMENT FOR DIAGNOSIS**

2 credits.

Introduction to the major approaches and techniques used in the psychological assessment of cognitive functioning of children, adolescents, and adults, with special emphasis on intellectual evaluation. Other cognitive areas to receive focus include; attention, memory, executive function, language, and academic achievement.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH 802 – ASSESSMENT OF PSYCHOPATHOLOGY & PERSONALITY**

2 credits.

Introduces the use of structured and semi-structured interviews typically used in psychodiagnostic settings, including research. The assessment of major/common psychopathologies and personality diagnosis will be covered. Additionally, several of the most commonly used clinical self-report and personality measures will be introduced (e.g., PAI, MMPI, BASC).

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PSYCH 803 – ADVANCED TECHNIQUES IN PSYCHOTHERAPY**

3 credits.

An overview of empirically supported psychotherapeutic movements and their associated history, philosophical underpinnings, and techniques. Oriented toward the theoretical perspective, basic tenets, and the practical techniques/skills of each psychotherapy.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PSYCH 805 – FIELD WORK IN CLINICAL PSYCHOLOGY**

1-3 credits.

Supervised field work in practical clinical situations.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PSYCH 806 – PRINCIPLES OF PSYCHOTHERAPY RESEARCH**

2 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PSYCH 807 – INTRODUCTION TO CONDUCTING PSYCHOTHERAPY**

3 credits.

Introduces and allows practice with the skills needed to conduct individual psychotherapy using a cognitive behavioral approach. Includes interviewing skills, planning and initiating CBT interventions, and the administrative demands of clinical practice. Also includes conducting psychotherapy and participating in individual and group supervision of those therapeutic contacts. During supervision, the client's issues, goals, and progress, will be discussed, as well as the clinician's professional presentation, therapeutic approach and techniques, and communication skills.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PSYCH 808 – CULTURE & DIVERSITY IN CLINICAL PRACTICE**

3 credits.

Becoming competent in working with diverse populations in psychotherapy is a complex interaction of many dimensions that involve broad theoretical, conceptual, research, and practice issues. Build multicultural competencies by increasing knowledge of ethnic, race, gender, sexual identity, religious affiliation, and age differences that contribute to each individual course of therapy. Applied examples of this "knowledge in practice" will be presented. Focuses on introducing the concepts of multicultural counseling and assessment, and more specifically on the diversity characteristics of race, ethnicity, and sexual orientation.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**PSYCH 809 – ETHICAL AND LEGAL ISSUES IN CLINICAL PRACTICE**

3 credits.

An introduction to the legal and ethical issues inherent to the conduct and process of professional clinical psychology. Reviews selected theories of moral philosophy, the American Psychological Association (APA) Ethical Principles and Codes of Conduct for Psychologists, other APA Standards and Guidelines and Wisconsin legal statutes governing the practice of psychology. Integrated with group case discussions and students. Use this as a forum to discuss ethical and legal issues pertinent to their ongoing clinical cases. Focuses on introducing ethical principles; Wisconsin statutes; ethics and legal obligations when clients report suicidal or homicidal thoughts/actions; reporting of neglect and abuse; and record keeping.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PSYCH 810 – CLINICAL SUPERVISION, CONSULTATION, & COMMUNITY PSYCHOLOGY**

3 credits.

Introduction to supervision and consultation as unique practices. Focuses on purposes of clinical supervision and consultation, theoretical frameworks and models of supervision and consultation, the roles and relationships related to clinical supervision and consultation, and legal, ethical and multicultural issues associated with clinical supervision and consultation. Also includes skill development in building a working alliance with a supervisee; providing developmentally appropriate performance feedback; planning and communicating strategies to develop rapport and motivation to solve problems in clients; negotiation and mediation to reach consensus and move past barriers; understanding and appreciating the diverse cognitive, behavioral, and effective characteristics of supervisees; applying theoretical material to case presentations and related experiential activities.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**PSYCH 811 – COGNITIVE BEHAVIOR THERAPY**

1 credit.

Examines the theory and practice of Cognitive-Behavior Therapy (CBT). Focuses on core issues of CBT from both theoretical and applied perspectives through case conceptualization exercises, role-plays, and application of CBT exercises to themselves.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PSYCH/B M I/COMP SCI 841 – COMPUTATIONAL COGNITIVE SCIENCE**

3 credits.

Studies the biological and computational basis of intelligence, by combining methods from cognitive science, artificial intelligence, machine learning, computational biology, and cognitive neuroscience. Requires ability to program.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**PSYCH/I SY E 854 – SPECIAL TOPICS IN ORGANIZATION DESIGN**

1-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**PSYCH/I SY E 859 – SPECIAL TOPICS IN HUMAN FACTORS ENGINEERING**

1-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH/ANTHRO 906 – METHODS AND HYPOTHESIS-TESTING FOR BEHAVIORAL ECOLOGISTS**

1-3 credits.

A detailed overview of field methods for behavioral ecologists, focusing specifically on behavioral and ecological sampling techniques. It addresses the challenging process of situating an empirical study within the context of theoretical paradigms.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020

**PSYCH 910 – PSYCHOMETRICS**

2 credits.

Focus on the construction, analysis, and interpretation of psychometric assessments, with an emphasis on concepts relevant to clinical psychology. Covers evolving issues in test theory. Extends beyond basic measurement concepts (scales, reliability, validity, bias, etc.) and critiques much of common practice from statistical and philosophical perspectives. Emphasizes that assessment always occurs in a societal context, which sometimes threatens validity.

**Requisites:** PSYCH 610 and declared in Psychology PhD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**PSYCH 918 – SEMINAR-GENERAL PSYCHOLOGY**

1-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**PSYCH 930 – SEMINAR-SOCIAL PSYCHOLOGY**

2-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH/GEN&WS 932 – PSYCHOLOGY OF WOMEN AND GENDER**

3 credits.

Examines research and theory in psychology of women and gender. Topics include feminist approaches to research methods, psychological gender differences and similarities, women of color, mental health and feminist therapy, rape, sexual harassment, transgender issues and research, and public policy issues.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PSYCH 954 – SEMINAR-PHYSIOLOGICAL PSYCHOLOGY**

2-3 credits.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**PSYCH 990 – RESEARCH**

1-12 credits.

Independent experimental, observational, or statistical investigation under the supervision of a staff member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**PSYCH/COUN PSY/ED PSYCH/RP & SE 995 – PREDOCTORAL INTERNSHIP**

0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

## PUBLIC AFFAIRS AND PUBLIC POLICY (PUB AFFR)

**PUB AFFR 200 – CONTEMPORARY PUBLIC POLICY ISSUES**

3 credits.

Offers a general primer on large-scale policies directed by US federal and state governments, with specific examples in pressing policy areas. Takes existing policies and the policy process as a given, explains them in detail, and puts a policy focus on very specific contemporary questions of concern to policymakers. Gain a broad overall knowledge of how the majority of state and federal funding is spent and the policy outcomes associated with that spending.

**Requisites:** None**Course Designation:** Breadth - Social Science  
Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PUB AFFR 201 – INTRODUCTION TO HEALTH POLICY IN THE UNITED STATES**

3 credits.

Offers an introduction to health policy in the United States. Examines the ways in which government plays a role in the provision and regulation of health care. Explores key aspects of health policy including the economics of health care (e.g., paying for and access to health care; the health care workforce; the role of markets and consequences of market/government failures, public policy that supports or promotes health; health care outcomes, quality, and disparities; and tools for evaluation) and special topics of interest such as policy addressing risky health behaviors, aging, mental health, and the Affordable Care Act. Think critically about public and private health issues using the policy analysis process, including policy interventions and their justifications, and gain skills in articulating and communicating policy positions.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 240 – EVIDENCE-BASED POLICY MAKING**

3 credits.

Facilitates skill-building to answer questions such as how policymakers use research and evidence in their jobs, how researchers can make their work useful to policymakers, and how legislative support staff and other stakeholders use research and evidence to shape policy. Explore the definition of "evidence-based", learn about different kinds of evidence and how it is used, and learn strategies for judging the rigor of research evidence. Also explore the difference between an education-based approach to working with policymakers versus an advocacy-based approach, learn strategies for communicating research to policy makers (including written and oral presentations and data visualizations), research examples of successful evidence-based policymaking efforts, and understand the limits of using research in policymaking.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 242 – FOUNDATIONS OF DATA ANALYSIS FOR HEALTH POLICY**

3 credits.

We have entered a new era of "big data." It is now possible to collect and analyze genetic information, digital health records, and many other types of data quickly, cheaply, and non-invasively from large numbers of people. This new wealth of information creates exciting opportunities for more targeted, individualized approaches to health care and better management of public health risks such as age-related diseases or pandemics. However, it also creates policy challenges such as privacy, discrimination, equality, and fairness. Covers what types of health-relevant data exist, how such data is typically analyzed and used, and discuss what types of applications this enables, what type of policy challenges this brings about, and which options policy makers have to deal with these challenges. Analytic methods will include regression, principal component and cluster analysis, statistical approaches for prediction, how to interpret the results of such analyses and their limitations.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**PUB AFFR 270 – THE PRIVATE AND PUBLIC SECTORS IN POLICYMAKING**

3 credits.

In domestic and international policymaking, stark differences between the private sector (the market) and the public sector (the state) are dissolving. The private sector is being pushed to help achieve public policy goals, while the public sector is being pushed to be customer-oriented. Overall focus on the interplay of the public and private sectors in policymaking. Develops an analytic framework and historical context for understanding how the roles and interactions of states and markets have fluctuated across time. Examines how the policymaking "division of labor" between states and markets has differed across countries. Examines energy, health, telecommunications, finance, transportation, or other policy areas in which governments are wary about letting markets function without state intervention. Apply concepts from political science, economics, public administration, business, sociology, and other fields in order to understand actual policy choices for various policy issues.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUB AFFR 274 – TOPICS IN PUBLIC POLICY**

3 credits.

Intensive study of selected topics in public policy.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**PUB AFFR 278 – PUBLIC LEADERSHIP**

3 credits.

Aims to demystify the role of leadership in a public setting. Draw on research from public management, psychology and organization studies to help students learn how leadership manifests itself in the public sector. This means understanding how to set goals, the motivation of those around you, how to engage and negotiate with stakeholders, managing change, making decisions, and exhibiting ethical behavior. Mix research with practical examples. Starts with the assumption that while there are some general traits relevant across public, private and non-profit sectors, the nature of these sectors is different, and this affects how these traits function in practice.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUB AFFR 281 – DISCOVERING WHAT WORKS IN HEALTH POLICY**

3 credits.

Introduces the key conceptual and methodological tools used in public program evaluation, with an emphasis on understanding the forces that shape health and disease as well as various policy solutions. Introduces the Potential Outcomes Framework, also known as the Rubin Causal Model. Establishes the distinction between causation from correlation using counterfactual thinking. Explores a wide variety of experimental and quasi-experimental research methods used to estimate causal effects, including randomized experiments, regression, matching, instrumental variables, fixed effects, regression discontinuity, difference-in-differences, and synthetic control. Many of the causal inference methods that we discuss require statistical and computational training in order to implement. Focuses on the nontechnical conceptual, theoretical, and intuitive underpinnings of these methods that are most salient to policymakers.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 285 – STRATEGIC PUBLIC MANAGEMENT**

3 credits.

Designed to teach the role that strategy plays in maximizing the effectiveness and efficiency of a public organization. Work in a collaborative environment to learn how to design and implement strategic management plans with a specific focus on measurable goal setting through analytics, how to identify and mitigate organizational risks, motivate employees to execute strategy, and finally how to mobilize adequate financial resources through dynamic budgeting to ultimately achieve success. Learn about careers in the public sector and understand how strategic management will enhance individual performance and that of the public organization.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 299 – DIRECTED STUDY**

1-3 credits.

Program of study devised by a student in collaboration with an instructor.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, for 3 number of completions**Last Taught:** Spring 2022**PUB AFFR 327 – ADMINISTRATIVE INTERNSHIP**

3 credits.

Provides opportunities for learning and working in organizations that integrate knowledge and theory learned in the classroom with practical application and skills development in a professional setting. Gain valuable applied experience and make professional connections in the field of public policy, apply concepts and practice problem solving-skills learned during the Certificate in Public Policy experience, build a network of contacts, and explore possible career choices. Engage with a wide range of people about their jobs, views, backgrounds, and experiences. Encourages active reflection on this experience and self-assessment through written assignments, reflections, and readings to help students make the most of their internships.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 366 – U.S. ENVIRONMENTAL POLITICS AND PUBLIC POLICY**

3 credits.

Public policies to protect natural resources and the environment are among the most important and controversial issues in local, state, and national government. Social science theories and methods help explain why and how American governments regulate the environment.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**PUB AFFR 380 – ANALYTIC TOOLS FOR PUBLIC POLICY**

3 credits.

An introduction to the role of policy analysis and the analytical concepts and tools that are used in the practice. Introduction to policy analysis, rationales for public policy, tools for framing policy problems, and the application of key concepts and methods from economics. Apply these concepts and tools through guided hands-on data exercises, interpreting and generating relevant informational graphics, producing a policy memo, and presenting results to technical policy problems and solutions.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PUB AFFR/POLI SCI 419 – ADMINISTRATIVE LAW**

3-4 credits.

Delegation of powers, elements of fair administrative procedure, judicial control over administrative determination. Not open to students with credit for POLI SCI 420 prior to fall 2017

**Requisites:** Sophomore standing and (POLI SCI 104, 184, or POLI SCI/LEGAL ST/POLI SCI 217)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**PUB AFFR 520 – INEQUALITY, RACE AND PUBLIC POLICY**

3 credits.

Explore the impact of public policies and programs on the distribution of income, wealth and opportunity in the United States. Examines inequalities across various social dimensions with a focus on disparities across racial and ethnic groups. Begin with an introduction to key concepts in the measurement of inequality and poverty and an overview of recent trends. Systematically examine how public policy shapes inequality across a range of topical areas including labor markets, education, taxation, health, housing and criminal justice.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFFR 523 – POLICY, PRIVACY, AND PERSONAL IDENTITY IN THE POSTGENOMICS ERA**

3 credits.

Social genomics integrates theories and methods in the genomic, social, and population health sciences to answer questions relevant to public health and social well-being. Research topics in social genomics and their implications for social and public policy are covered in this course. Key concepts in human genetics, population genetics, and statistical genetics are introduced, as well as historical and contemporary policy debates surrounding scientific advances in genomics. Fundamental questions include social repercussions of genomics research, the rationale for government intervention, and how to approach policy analysis in an era where the genomic revolution is changing how we think about privacy and personal identity.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PUB AFFR/ECON/POP HLTH 548 – THE ECONOMICS OF HEALTH CARE**

3-4 credits.

Analysis of the health care industry. Markets for hospitals and physicians' care, markets for health manpower, and the role of health insurance.

**Requisites:** ECON 301, ECON 311, or PUB AFFR 880

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFFR/CIV ENGR 694 – MANAGEMENT OF CIVIL INFRASTRUCTURE SYSTEMS**

3 credits.

Comprehensive systems approach to civil infrastructure and asset management with emphasis on transportation facilities. Social, political, economic factors that influence transportation planning, design, construction, maintenance and operation. Needs assessment, information management, performance measurement, life cycle cost and benefits analysis, prioritization and optimization, budgeting and finance.

**Requisites:** CIV ENGR 494, or graduate/professional standing, or member of Engineering Guest Students

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PUB AFFR/HISTORY/POLI SCI 724 – THE POLITICS OF PERSUASION: SOFT POWER IN EUROPE AND THE U.S.**

1-3 credits.

How powerful is non-military power? What are its vectors and its limits? International relations theorists have defined soft power as "the ability to get what you want through attraction rather than coercion." This graduate seminar will put this notion to the test. We will investigate how elites, interest groups, religious bodies, and nation-states seek to exercise hegemony in the international order through non-violent means. How was "soft power" implemented on the ground in the 20th century- and how did its use transform international relations? To probe these questions, we will focus on a series of case studies in European and U.S. international history. Topics covered include the expansion of capitalism and consumer culture; the globalization of international legal instruments and human rights claims; and de-secularization, religious radicalism, and counter-insurgency. In the process of analyzing our case studies, we will refine our analytical vocabulary. Drawing on recent work in international relations, political theory, and international history, we will probe the meaning and utility of concepts like normative power, hegemony, cultural capital, and public diplomacy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016



### **PUB AFFR/ECON/URB R PL 734 – REGIONAL ECONOMIC PROBLEM ANALYSIS**

3 credits.

Examination of major theories of regional economic development, with special emphasis upon the evolution and amelioration of regional economic problems. Selected techniques of regional analysis, including economic base multipliers, input/output models, and shift-share analysis are used in the context of setting regional development goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **PUB AFFR/ED POL/ELPA 765 – ISSUES IN EDUCATIONAL POLICY ANALYSIS**

3 credits.

Theory, research, and practical experience in educational policy analysis, including the social construction of policy problems in education; the design, implementation, and evaluation of policy responses; and the practical and ethical dilemmas of the policy analyst.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PUB AFFR 799 – INDEPENDENT READING**

1-3 credits.

Program of study devised by a student in collaboration with an instructor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PUB AFFR 800 – PUBLIC AFFAIRS PROFESSIONAL DEVELOPMENT WORKSHOP**

1 credit.

Includes sessions on professional writing, presentations, and job search skills training related to policy internships and jobs. Includes presentations from practitioners from the public, private, and non-profit sectors.

**Requisites:** Declared in Public Affairs MPA or International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **PUB AFFR 802 – PUBLIC AFFAIRS SEMINAR SERIES**

1-2 credits.

Provides an opportunity to cross disciplinary boundaries to review and discuss the latest research by top public management, policy, and poverty scholars from on and off campus. The seminar series provides new and unpublished research on these issues as well as practitioner insight.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **PUB AFFR/ED POL/GEN&WS 805 – GENDER ISSUES IN INTERNATIONAL EDUCATIONAL POLICY**

3 credits.

Exploration and analysis of recent debates related to gender issues in international educational policy, including the intersection of education and demographic processes, the play of history and culture, and the social construction of gender.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **PUB AFFR/ENVIR ST/URB R PL 809 – INTRODUCTION TO ENERGY ANALYSIS AND POLICY**

3 credits.

Strategy and policy problems in energy policy, both national and international.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **PUB AFFR/ENVIR ST/URB R PL 810 – ENERGY ANALYSIS AND POLICY CAPSTONE**

3 credits.

Interdisciplinary application of energy knowledge to an analysis project for a real-world client. Integrate and apply technical, economic, political, and social factors in energy decision-making.

**Requisites:** Declared in Energy Analysis and Policy Graduate/Professional Certificate or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR 818 – INTRODUCTION TO STATISTICAL METHODS FOR PUBLIC POLICY ANALYSIS**

3 credits.

An introduction to the statistical methods used in public policy. Covers the basics of probability, statistics, and quantitative methods in public policy analysis. Stresses interpretation and presentation of data as well as theory.

**Requisites:** Declared in Public Affairs MPA or International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUB AFR 819 – ADVANCED STATISTICAL METHODS FOR PUBLIC POLICY ANALYSIS**

3 credits.

A review of intermediate statistics, and an introduction to analytical, quantitative and computer techniques applicable to the analysis of public policy.

**Requisites:** PUB AFR 818

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR 820 – COMMUNITY ECONOMIC ANALYSIS**

3 credits.

Economic theory (location and growth) applicable to community economic development; the role of private and public sector in local economic development, and techniques for economic analysis of community.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR 827 – ADMINISTRATIVE INTERNSHIP**

1-3 credits.

Provides opportunities for learning and working in organizations that integrate knowledge and theory learned in the classroom with practical application and skills development in a professional setting.

**Requisites:** Declared in Public Affairs MPA or International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR/ED POL/ELPA 830 – SCHOOL FINANCE AND RESOURCE ALLOCATION**

3 credits.

Contemporary bases for collecting and distributing local, state, and federal funds for elementary and secondary education; problems and issues in financial support of education; current, alternative and more effective uses of educational resources.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**PUB AFR 850 – INTERNATIONAL GOVERNANCE**

3 credits.

Examines influences arising from international environment on policy makers and those seeking to influence policymaking. Considers role of global economic forces, international and regional organizations, international civil society reflected in non-governmental organizations, and flow of policies across borders.

**Requisites:** Declared in Public Affairs MPA or International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUB AFR 854 – MACROECONOMIC POLICY AND INTERNATIONAL FINANCIAL REGULATION**

3 credits.

An introduction to international macroeconomic and financial policies with an emphasis on the interaction between domestic policies, and international financial markets, regulations and institutions.

**Requisites:** PUB AFR 880 and declared in International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PUB AFR 856 – TRADE, COMPETITION, AND GOVERNANCE IN A GLOBAL ECONOMY**

3 credits.

Policy oriented course in international micro-economics and trade theory; including economic and institutional analysis of U.S. trade policy and the world trading system; issues covered include regional trading average; labor standards, income distribution and the environment.

**Requisites:** PUB AFR 818 and 880

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PUB AFR 857 – POLITICAL ECONOMY OF CORRUPTION AND GOOD GOVERNANCE**

3 credits.

Surveys wide range of multidisciplinary research on causes and consequences of widespread corruption and experiences of anticorruption reform strategies, with focus on developing countries. Considers role of international organizations, multinational companies, and regional agreements in building good governance globally.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR 860 – WORKSHOP IN INTERNATIONAL PUBLIC AFFAIRS**

3 credits.

Workshop in program evaluation and policy analysis taught through student teams working on real-world international issues for agencies in the public, private, and non-profit sectors. Teaches analytical skills, report preparation and writing, and presentation of results.

**Requisites:** PUB AFR 873 and declared in International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR 864 – HEALTH POLICY AND POLICY DESIGN**

3 credits.

Survey health care policy in the United States, including examination of the design of health policy and the politics of health care reform.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PUB AFR/ENVIR ST/POLI SCI 866 – GLOBAL ENVIRONMENTAL GOVERNANCE**

3 credits.

In-depth examination of the political and policy challenges posed by global environmental degradation. Analysis of international institutions for managing the global environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**PUB AFR 869 – WORKSHOP IN PUBLIC AFFAIRS**

3 credits.

Workshop in program and policy analysis taught through student teams working on real problems for public agencies and organizations; teaches analytical skills, report preparation and writing; and presentations of results.

**Requisites:** PUB AFR 873 and declared in Public Affairs MPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR/POLI SCI 871 – PUBLIC PROGRAM EVALUATION**

3 credits.

Compares the conceptual, statistical, and ethical issues of experimental, quasi-experimental and non-experimental designs for program evaluation. Definitions of outcomes, sample size issues, statistical biases in measuring causal effects of programs, and the reliability of findings will be emphasized using case studies selected from current public programs.

**Requisites:** PUB AFR 818

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUB AFR 873 – INTRODUCTION TO POLICY ANALYSIS**

3 credits.

Develops skills in policy analysis in two ways. First, sets out the conceptual foundations for understanding the role of policy analysis in democratic politics. Second, provides training and experience in policy analysis craft.

**Requisites:** PUB AFR 880 and declared in Public Affairs MPA or International Public Affairs MIPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUB AFR/POLI SCI/URB R PL 874 – POLICY-MAKING PROCESS**

3 credits.

Examines the political, social, and economic contexts that shape and are shaped by policy making processes. Though the focus is on the US, international comparisons will be made, and students are encouraged to think about the American context through comparative and international perspectives. Familiarizes students with dominant theories and models of policymaking process and policy change, starting with the model of the policy cycle. Focuses in on key topics and issues in policy making, specifically, agenda setting, implementation, and the relationships between policymaking and democracy. Reflects on contemporary and emerging issues and dilemmas of the politics of policy making.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUB AFFR/POLI SCI 875 – PUBLIC PERSONNEL ADMINISTRATION**

3 credits.

Analysis of personnel policies and practices in the public sector and examination of patterns of interaction between political executives, personnel professionals, public employees, and interest groups in the development of personnel policies. Compares problems and approaches of different countries as well as those of the various levels of government in the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**PUB AFFR/POLI SCI/URB R PL 878 – PUBLIC MANAGEMENT**

3 credits.

Role of administration in American government; problems of organization, bureaucracy and control; public policy as the output of the administrative process.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR 880 – MICROECONOMIC POLICY ANALYSIS**

3 credits.

The tools and techniques used in the economic approach to policy analysis. Emphasis is on applying these methodological tools to evaluating existing public policies and policy alternatives, as well as providing a deeper understanding of how the economy operates.

**Requisites:** Declared in Public Affairs MPA or International Public Affairs MIPA**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUB AFFR/A A E/ENVIR ST/POP HLTH 881 – BENEFIT-COST ANALYSIS**

3 credits.

Presents the welfare economics underpinnings for evaluating the social benefits and costs of government activities. Issues such as uncertainty, the social discount rate, and welfare weights will be discussed; case studies from the environmental, social policy, and agricultural areas will be studied.

**Requisites:** Graduate/professional standing and (PUB AFFR 818 and 880), or I SY E/POP HLTH/I SY E 875, or A A E 635**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUB AFFR 883 – POLITICS OF POVERTY, INEQUALITY, AND SOCIAL POLICY**

3 credits.

Surveys the political forces that shape poverty, inequality, and related public policies in the United States. Builds on foundational knowledge of the policy-making process to provide skills to understand and negotiate social politics in the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2018**PUB AFFR/POLI SCI 885 – ADVANCED PUBLIC MANAGEMENT: CRAFT, CONSTRAINTS AND ACCOUNTABILITY**

3 credits.

Examines how managers in public and not-for-profit agencies can secure and utilize legal authority, human resources, and funds to accomplish organizational goals. Includes strategies for establishing and maintaining effective external relations and for working through other organizations to accomplish objectives.

**Requisites:** POLI SCI/PUB AFFR/URB R PL/POLI SCI/PUB AFFR 878**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUB AFFR/SOC WORK 887 – NONPROFIT LEADERSHIP**

3 credits.

Nonprofit leadership focuses on developing management skills for the nonprofit area through readings, case materials and structured activities. Students examine the context, issues and skills associated with leadership and management in nonprofit organizations and apply them to challenges and opportunities that confront administration of nonprofits.

**Requisites:** Declared in Social Work MSW, or Public Affairs MPA**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**PUB AFFR 888 – COMPARATIVE AND NATIONAL SOCIAL POLICY**

3 credits.

An overview of the American system of public policy toward human resources, with an emphasis on how the American system compares with other nations' approaches to social welfare policy. Other nations include OECD nations as well as emerging middle income countries in Asia and Latin America. Social welfare policy is analyzed as three major branches: health, education and welfare.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

### **PUB AFFR/POLI SCI/URB R PL 890 – FEDERAL BUDGET AND TAX POLICY AND ADMINISTRATION**

3 credits.

Focuses on national budget and tax policy and administration, and the parallel processes at the state and local levels. Included are discussions of: decision-making theories; budget and tax policy; and analysis of normative and empirical criteria and analytical techniques for assessing alternative policy proposals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

### **PUB AFFR 891 – STATE AND LOCAL GOVERNMENT FINANCE**

3 credits.

Explores the spending and tax policies of state and local governments. Focus on factors influencing the mix and level of public spending and the choice of revenue sources. Issues to be studied include the fiscal relations between governments and property tax.

**Requisites:** PUB AFFR 880

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PUB AFFR 892 – PUBLIC BUDGETING**

3 credits.

Provides an understanding of budget preparation, adoption and execution; proposed reforms of the budget process; and competing theories of the politics of budgeting. Focuses on the expenditure aspect of budgeting.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **PUB AFFR 895 – PERFORMANCE MANAGEMENT**

3 credits.

Introduction to the concept of performance management. Explores different tools that aim to raise performance. Examines recent reforms at the federal, state, and local level and alternative theories of performance.

**Requisites:** POLI SCI/PUB AFFR/URB R PL/POLI SCI/PUB AFFR 878

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **PUB AFFR 974 – TOPICS IN PUBLIC AFFAIRS**

3 credits.

Current issues in the formulation, implementation, and analysis of public policy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **PUBLIC HEALTH (PUBLHLTH)**

### **PUBLHLTH 700 – TOPICS IN PUBLIC HEALTH**

1-3 credits.

Special topics in public health.

**Requisites:** Declared in Master of Public Health program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

### **PUBLHLTH 710 – INTRODUCTION TO GLOBAL HEALTH: HISTORY, CURRENT ISSUES, AND HEALTH STATISTICS**

2 credits.

Provides opportunities that facilitate learning in the areas of global health history and contemporary issues; global health frameworks, policies, and assessing and critically evaluating data; the socioecological model for global health, health equity and disparities; and, global health communication. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level.

**Requisites:** Graduate/professional standing, or declared in the Capstone Certificate in Global Health Online

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **PUBLHLTH 711 – GLOBAL PUBLIC HEALTH AND HEALTHCARE SYSTEMS: ORGANIZATIONS, GOVERNANCE, FINANCING, AND WORKFORCE**

2 credits.

Provides opportunities that facilitate learning in the areas of global health systems, organizations, governance, and financing; global health security; emergency medical services and injury epidemiology; health in complex emergencies, and, health issues in refugee, immigrant, and internally-displaced persons. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level.

**Requisites:** Graduate/professional standing, or declared in the Capstone Certificate in Global Health Online

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUBLHLTH 712 – GLOBAL HEALTH: INFECTIOUS DISEASES, ONE HEALTH, AND PREVENTION STRATEGIES**

2 credits.

Provides opportunities that facilitate learning in the areas of communicable disease surveillance, prevention strategies, and management, including AIDS, tuberculosis, malaria; dengue and other vectorborne diseases; neglected tropical diseases; vaccine preventable diseases; One Health and zoonotic diseases; novel disease emergence; WASH programs (water, sanitation, and hygiene); and bioterrorism. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level.

**Requisites:** Graduate/professional standing, or declared in the Capstone Certificate in Global Health Online

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUBLHLTH 713 – GLOBAL HEALTH: NON-COMMUNICABLE DISEASES, POVERTY, ENVIRONMENTAL HEALTH, AND FOOD SECURITY**

2 credits.

Provides opportunities that facilitate learning in the areas of globally important non-communicable diseases, including but not limited to type 2 diabetes, hypertension, and developmental and acquired disabilities; the global epidemiology of non-communicable diseases; health determinants and indigenous health beliefs and practices; mental health and wellness, including interpersonal violence and opioid abuse; and, food security, nutrition, and obesity. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level.

**Requisites:** Graduate/professional standing, or declared in the Capstone Certificate in Global Health Online

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUBLHLTH 714 – GLOBAL HEALTH FIELD WORK FUNDAMENTALS: ENGAGEMENT, ETHICS, POLICY, AND METHODS**

2 credits.

Provides opportunities that facilitate learning in the areas of global health studies, engagement, and health data; ethics of global health engagement and international aid; global health research and quality improvement, including human subjects research and the IRB processes; and, international travel planning. Presumes some background and understanding of basic principles of health and addresses topics at a graduate level.

**Requisites:** Graduate/professional standing, or declared in the Capstone Certificate in Global Health Online

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUBLHLTH 715 – GLOBAL HEALTH ISSUE ANALYSIS**

1 credit.

A structured independent study experience to research a major global health issue, including interviews with local key informants, integrating previous educational experiences in global health.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**PUBLHLTH 716 – STUDY ABROAD GLOBAL HEALTH FIELD EXPERIENCE**

1-4 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Current enrollment in a UW-Madison study abroad program.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**PUBLHLTH/NURSING/PHARMACY/PHY ASST/PHY THER 758 – INTERPROFESSIONAL PUBLIC HEALTH LEADERSHIP**

1 credit.

Build skills in collaboration, problem solving, and reflection to approach complex community-based public health problems contribute to becoming a public leader. Explore the six levels of public health leadership through the practices of current and past public health leaders, case studies, and personal experience.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**PUBLHLTH 777 – CLINICAL MEDICINE AND PUBLIC HEALTH**

2 credits.

Addresses the interface between the practice of clinical medicine and evidence-based approaches to public health needs and issues and community health improvement. A focus on emerging issues and opportunities to work with community-based public health practitioners while exploring career goals and the intersection between clinical medicine and public health.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**PUBLHLTH 780 – EVIDENCE-BASED DECISION-MAKING**

3 credits.

An interprofessional course addressing evidence-based approaches to public health needs and issues and community health improvement. Features problem-based learning with a focus on emerging issues and opportunities to work with community-based public health practitioners.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUBLHLTH 781 – COMMUNICATING PUBLIC HEALTH EFFECTIVELY I**

1 credit.

Exploration of current public health issues, interprofessional approaches and modes of communication within the MPH Program and the public health practice community. Content will advance students' analytic assessment, communication, and systems-thinking skills.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUBLHLTH 782 – DETERMINANTS OF HEALTH AND HEALTH EQUITY: A SYSTEMS APPROACH**

3 credits.

The social determinants of health, determined by deep rooted and inequitably distributed resources via institutions and systems that shape our communities and the world that we live in, are the key factors that shape ill health and exacerbate inequities in the health and well being of populations. Provides grounding in the social determinants of health through a health equity framework. Students will learn about health equity frameworks and how to integrate them into their public health practice and research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUBLHLTH 783 – QUANTITATIVE APPROACHES TO PUBLIC HEALTH**

4 credits.

Gain the fundamental principles of epidemiology and biostatistics with an emphasis on those elements most relevant to applied public health practice. Provides training in epidemiology and biostatistical theory and methods through applied case examples that blend epidemiology principles with foundational statistical knowledge needed to collect and analyze public health data.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**PUBLHLTH 784 – QUANTITATIVE APPROACHES TO PUBLIC HEALTH II**

3 credits.

Gain an understanding of the fundamental principles of epidemiology and biostatistics with an emphasis on essential aspects in applied public health practice. Case studies provide training in epidemiology and biostatistical theory and methods that blend epidemiology principles with foundational statistical knowledge needed to collect and analyze public health data.

**Requisites:** PUBLHLTH 783**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUBLHLTH 785 – PUBLIC HEALTH AND HEALTH CARE SYSTEMS**

3 credits.

Focuses on the fundamental characteristics of the public health and health care systems, including key factors in performance, organization, financing, and delivery of services in major sectors of the U.S. health care system.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUBLHLTH 786 – PLANNING AND MANAGEMENT TO PROMOTE HEALTH**

3 credits.

Gain knowledge about theory, concepts, and methods of program planning and evaluation in the context of health care and community health organizations. Covers content and case studies on planning, designing, and implementing health services and quality improvement projects. Basic principles of tools for budget development and resource management related to grants or projects are included. Class projects provide the opportunity to collaborate in the creation of program plans, logic models, and grant proposals.

**Requisites:** PUBLHLTH 780 (or POP HLTH 780 prior to Fall 2019)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**PUBLHLTH 787 – MPH APPLIED PRACTICE EXPERIENCE SEMINAR**

1 credit.

Prepares Master of Public Health students for applied practice experience in a community setting.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**PUBLHLTH 788 – APPLIED PRACTICE EXPERIENCE**

1-6 credits.

Master of Public Health students gain practical experience in a public health setting as outlined in their learning agreement.

**Requisites:** PUBLIC HEALTH 787

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**PUBLHLTH 790 – PUBLIC HEALTH AND SOCIAL JUSTICE: TOOLS AND MODELS**

2 credits.

Integrate public health knowledge, skills and practice acquired through didactic and experiential courses to find solutions to complex public health issues using public health tools and models that apply systems thinking, cultural humility and evidence-based decision making, framed within a social justice perspective.

**Requisites:** Declared in Public Health MPH

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**PUBLHLTH 791 – COMMUNICATING PUBLIC HEALTH INFORMATION EFFECTIVELY II**

2 credits.

Designed to improve public health professionals' abilities to communicate with different audiences such as news media, legislators, board members, and the public. Learn strategies for health communication based on scientific recommendation and apply these skills by planning and executing communication activities used in the field.

**Requisites:** PUBLHLTH 781

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUBLHLTH 792 – PUBLIC HEALTH POLICY AND POLITICS**

3 credits.

Gain an understanding of the process of public policy development and an understanding of how and why health policies reflect the political system in which they are developed and implemented.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**PUBLHLTH 793 – PUBLIC HEALTH LEADERSHIP**

2 credits.

Gain knowledge and skills in public health leadership attributes and style, communication, collaboration, negotiation, and advocacy, and a framework for advancing population health improvement within and across organizations. Explore the theories and principles of leadership, leadership styles and practices, and the skills and knowledge needed to be a public health leader.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RADIOLOGY (RADIOL)****RADIOL/B M E/MED PHYS/PHMCOL-M/PHYSICS 619 – MICROSCOPY OF LIFE**

3 credits.

Survey of state of the art microscopic, cellular and molecular imaging techniques, beginning with subcellular microscopy and finishing with whole animal imaging.

**Requisites:** PHYSICS 104, 202, 208, or 248 or MED PHYS/PHYSICS/ MED PHYS 265

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RADIOL 711 – JOURNAL CLUB**

1 credit.

Student Seminar and Journal club for second year students in the Medical Scientist Training Program.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**RADIOL 813 – RADIOLOGY CLERKSHIP**

1-2 credits.

Introduction to principles and technology of diagnostic radiology. Emphasis on fundamental interpretation skills in chest, abdominal and bone films, and in cross-sectional anatomy. Discussions focused on appropriate, cost efficient radiologic workup and image guided surgery.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

### **RADIOL 910 – INDEPENDENT READING AND RESEARCH IN RADIOLOGY**

2-8 credits.

Independent research under the supervision of faculty in the Department of Radiology. Student's research projects are individualized to meet individual student research goals within the context of faculty research needs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RADIOL 911 – IMAGING AND EMBRYOLOGY: THE BASIC SCIENCE OF FETAL DYSMORPHOGENESIS**

2 credits.

The diagnosis and management of congenital abnormality requires an understanding of the basic principles of embryology, imaging, and genetics. Replicating how patients enter the medical system, the didactic path begins with ultrasound diagnosis of fetal abnormality. The embryological basis of the fetal malformations will be examined. From this center, exposure to advanced diagnostics, such as fetal echocardiography, fetal MRI, and genetic testing and counseling. Topics extend to early postnatal care (pediatric genetics and pediatric radiology). Participate in the Meriter Perinatal Conference, learn about genetic approaches to the diagnosis of fetal malformation syndromes, and learn the rudiments of an obstetrical sonogram.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RADIOL 914 – PHYSICIAN FINANCIAL WELLNESS**

1 credit.

Graduating medical students are faced with a wide array of financial planning and wellness challenges. The median medical student debt has continued to increase, and there is a corresponding proliferation of federal repayment and forgiveness options. Other financial planning needs, such as budgeting and insurance, also arise during this time of transition. A unique opportunity to learn key concepts around budgeting, investing, insurance, and negotiation through independent and group learning experiences. This format allows for better analysis on financial decisions and to understand the impact of these decisions on both current and future financial health and wellness.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RADIOL 920 – DIAGNOSTIC RADIOLOGY ELECTIVE**

2 credits.

Familiarizes the student with the various imaging and therapeutic procedures that are performed in radiology. In addition to learning about the strengths and limitations of different imaging studies, the student should attempt to relate abnormal radiologic findings to pathophysiology with logic and confidence. Students will be given the opportunity to rotate through the section of their choice for 2 weeks in the Radiology department and are able to tailor their reading room experiences to their interests. They will engage in hands on learning activities, interactive assignments, and learn to communicate in interdisciplinary conversations about patient care when it comes to best practices with radiology.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RADIOL 923 – CLINICAL NUCLEAR MEDICINE ELECTIVE**

2 credits.

Work directly with faculty in the Nuclear Medicine section of the Department of Radiology. Broad-based experience in a variety of procedures routinely performed by the nuclear medicine service, including nuclear cardiology. Practice in building and presenting a case report.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RADIOL 924 – GENERAL RADIOLOGY ELECTIVE**

2-4 credits.

Elective opportunity to study basic radiological studies and modalities. Gain proficiency in identifying normal structures and can't miss diagnoses on a chest radiograph and abdominal films as well as determining indications for advanced studies (computed tomography CT, magnetic resonance imaging MRI, ultrasound US, angiograms). Practice in building and presenting a case report.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RADIOL 926 – INTERVENTIONAL RADIOLOGY ELECTIVE**

2-4 credits.

High-level procedural experience on a clinical interventional radiology service. Interventional radiology uniquely blends the concepts of imaging anatomy and pathophysiology to provide minimally invasive solutions to patients. Hone clinical and procedural skills while being exposed to a rich background curriculum with the goal of case report publication.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RADIOL 928 – SCREENING IN RADIOLOGY**

2 credits.

Clinical experience on diagnostic radiology service. Apply population health and epidemiology principles to screening exam selection in radiology. Participate in interdisciplinary conversations surrounding patient care. Practice in patient-centered communication and in creating a case report.

**Requisites:** MED SC-M 810, 812, 813, and 911

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## REAL ESTATE AND URBAN LAND ECONOMICS (REAL EST)

**REAL EST/A A E/ECON/URB R PL 306 – THE REAL ESTATE PROCESS**

3 credits.

Introductory overview focused on the key aspects of the real estate process: developing real estate, permitting real estate, buying and selling real estate, understanding the economics of real estate, financing real estate, valuing real estate, leasing real estate, and managing real estate.

**Requisites:** (ECON 101, 111, or A A E 215) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 365 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** Sophomore standing or declared in undergraduate Business Exchange program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**REAL EST 399 – READING AND RESEARCH-URBAN LAND ECONOMICS**

1-6 credits.

Individual work suited to the needs of undergraduate students.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**REAL EST 410 – REAL ESTATE FINANCE**

3 credits.

Fundamentals of real estate finance and investment. Qualitative and quantitative characteristics of commercial real estate. Developing and analyzing commercial property cash flow projections. Introduction to three approaches to valuation with emphasis on investing in commercial real estate. In-depth exposure to debt and equity investor returns.

**Requisites:** A A E/ECON/REAL EST/URB R PL/A A E/ECON/REAL EST 306 and (FINANCE/ECON/FINANCE 300 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 411 – REAL ESTATE EXCEL MODELING**

1 credit.

Introduction to real estate modeling. Building a real estate model for acquisition and development transaction for residential and commercial real estate using Excel. How to source market data, draw assumptions from market data, input assumptions, make decisions using reports, perform sensitivity analysis on model inputs, and explain terminology used in residential and commercial real estate.

**Requisites:** REAL EST 410 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 412 – REAL ESTATE ARGUS MODELING**

1 credit.

Introduction to real estate modeling using ARGUS. ARGUS will be used to build a real estate model for acquisition transactions for office and retail mall properties. In addition, learn how to input assumptions, make decisions using reports, perform sensitivity analysis on model inputs and explain terminology used in Office and Retail real estate.

**Requisites:** REAL EST 410 and (REAL EST 411 or concurrent enrollment)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 415 – VALUATION OF REAL ESTATE**

3 credits.

Techniques of real estate valuation. Property analysis, market analysis, legal and political analysis, and highest and best use analysis; in-depth exposure to the three approaches to valuation; sales comparison, income, and cost; application to main commercial property types; the role of valuation in real estate investment.

**Requisites:** REAL EST 410, 411, and (REAL EST 412 or concurrent enrollment), or declared in undergraduate Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST/ECON/URB R PL 420 – URBAN AND REGIONAL ECONOMICS**

3 credits.

Focuses on the study of the allocation of scarce resources across space. Uses economic methods to analyze urban real estate. Topics covered include the determinants of real estate values, the location decisions of households and firms, land use, urban growth and agglomeration, real estate pricing, cycles, development, housing market and policies, and sustainable development.

**Requisites:** (ECON 101 or 111) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST 425 – REAL ESTATE LAW**

3 credits.

Analyzes current issues in real estate law with a focus on the acquisition, leasing, financing, and development of real estate projects. Includes a big picture view of these topics as well as analyzing them in the specific context of various development deals underway across the United States.

**Requisites:** REAL EST 410, 415, and (REAL EST/ECON/URB R PL/ECON/REAL EST 420 or concurrent enrollment), graduate standing, or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST/INTL BUS 430 – INTERNATIONAL REAL ESTATE**

3 credits.

Analysis of international real estate and related transaction issues, especially in foreign countries which are visited as part of the course; survey of land use patterns and regulations, ownership rights, types of leases, transfer procedures, mortgage system, tax matters, currency risks, and geographical diversification issues.

**Requisites:** A A E/ECON/REAL EST/URB R PL/A A E/ECON/REAL EST 306 or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **REAL EST/A A E/URB R PL 520 – COMMUNITY ECONOMIC ANALYSIS**

3 credits.

Economic theory (location and growth) applicable to community economic development; the role of private and public sector in local economic development, and techniques for economic analysis of community.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST 530 – REAL ESTATE INVESTMENT ANALYSIS**

3 credits.

A capstone focused on comprehensively underwriting commercial real estate. Investment analysis will be performed for a variety of real estate property types from the perspective of various real estate professionals, such as the property/asset manager, finance professional, leasing broker, acquisitions specialist, portfolio manager, and investment legal/risk team. The investment analysis will emphasize the importance of value-creation through capital investment and effective income and expense management.

**Requisites:** REAL EST 415 and (REAL EST 425 or current enrollment), or graduate/professional standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST 540 – PUBLIC REAL ESTATE EQUITY INVESTMENT**

3 credits.

Understanding and applying both investment and real estate concepts to the Real Estate Investment Trust (REIT) market. Emphasis is on applying investment and real estate concepts to a specific REIT.

**Requisites:** (REAL EST 410 or 710) and (FINANCE/ECON 300 or 700)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST 550 – PRIVATE REAL ESTATE EQUITY INVESTMENT I: ANALYSIS AND STRUCTURES**

3 credits.

Introduction to real estate private equity investment focused on the analysis, terms, return metrics, and structures used to make real estate private equity investment decisions.

**Requisites:** REAL EST 415, declared in Business: Real Estate and Urban Land Economics graduate programs, or the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **REAL EST 611 – RESIDENTIAL PROPERTY DEVELOPMENT**

3 credits.

A capstone course. In-depth exposure to the world of the residential builder/developer/subdivider and the necessary tools of analysis--market analysis, zoning/environmental and other entitlements, site planning and design, infrastructure/construction cost analysis, financing, feasibility analysis, deal structuring, renovation/rehabilitation, special needs housing.

**Requisites:** (REAL EST 410 and 415) or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 640 – REAL ESTATE CAPITAL MARKETS**

3 credits.

Thorough discussion of how public real estate investment products such as Mortgage-Backed Securities (MBS) and Real Estate Investment Trusts (REIT) are structured and how investors price them. Exploration of key strategic considerations for institutional investors in their real estate investments. Analysis of the equity side of real estate, review of mortgage math, analysis of MBS and real estate equity investments by looking at specific REITs.

**Requisites:** REAL EST 410**Repeatable for Credit:** No**Last Taught:** Fall 2022**REAL EST/ECON/URB R PL 641 – HOUSING ECONOMICS AND POLICY**

3 credits.

The economic principles underlying the dynamics of the housing market; filtering, neighborhood decline and abandonment gentrification, tenure choice, mortgage choice, prepayment, mobility, mortgage default, submarket identification, racial discrimination and segregation. Examination of governmental programs affecting the housing market and their objectives and impacts; public and subsidized housing, zoning and land use regulation, rent and price controls, property and income tax policy.

**Requisites:** ECON/REAL EST/URB R PL/ECON/REAL EST 420 or concurrent enrollment**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**REAL EST 651 – GREEN - SUSTAINABLE DEVELOPMENT**

3 credits.

Intended for students who have an interest in Green and Sustainable aspects of housing and commercial property development and operation, the re-use and/or rehabilitation of existing structures, redevelopment of historic buildings into housing or commercial space and related special topics such as financing sources, tax issues, financial structuring, legal issues and energy cost management.

**Requisites:** Sophomore standing or declared in the Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**REAL EST 661 – REAL ESTATE INVESTMENT ANALYSIS AND PRESENTATION**

3 credits.

A real world capstone experience of the real estate investment process from project conception to asset disposition with particular focus on analysis and presentation. Provides exposure to best known methods and practices that private equity and development firms use to conduct market research, project selection, financial feasibility, regulatory review, design considerations, construction management, debt financing, equity placements, equity waterfalls, property management, asset management and disposition. Students will develop an interdisciplinary understanding of the many facets of the acquisition and development process in the U.S. and have an insightful understanding of the risks and rewards along each step of the process.

**Requisites:** Senior standing, (REAL EST 410 or 415) and (REAL EST 411 or concurrent enrollment or REAL EST 631 prior to Fall 2023)**Repeatable for Credit:** No**Last Taught:** Spring 2023**REAL EST 706 – THE REAL ESTATE PROCESS**

3 credits.

Institutional background of real property; economics of urbanization, supply and demand; building industry, real estate credit, cyclical fluctuation, rents and prices, real estate market analysis; city growth, structure and planning, land use control, urban redevelopment and real estate investment analysis.

**Requisites:** Graduate/professional standing and (ECON 301 or 311)**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**REAL EST 710 – REAL ESTATE FINANCE**

3 credits.

Evaluating the role of financing and leverage in real estate investment analysis; identifying alternative types of financing; valuation of financial structure; sources of equity financing for real estate; mortgage securitization and the operation of secondary mortgage markets.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**REAL EST 712 – REAL ESTATE LAW**

3 credits.

Advanced principles of real estate law related to ownership rights, negotiations, brokering, transfers, condominium law, financing, income tax law, real estate property taxation, bankruptcy law, construction and development contracts, and residential and commercial leases, and an overview of international legal systems.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021



**REAL EST 715 – TECHNIQUES OF REAL ESTATE VALUATION**

3 credits.

Topics include highest and best use and most probable use analysis, statistical methods for developing adjustment factors and comparable selection for the market comparison approach, discounted cash flow analysis and income capitalization, and cost approach methods. Issues in appraisal ethics and federal requirements for appraisal practice.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST/URB R PL 720 – URBAN ECONOMICS**

3 credits.

Analysis of spatial relationships in the urban economy, including urban land, labor and housing markets; urban transport; city governance and finance; and regional models. Historical and applied focus. Interdisciplinary approach emphasizing economics, geography, and planning.

**Requisites:** Graduate standing and (ECON 301 or 311)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**REAL EST 750 – COMMERCIAL PROPERTY DEVELOPMENT**

3 credits.

A capstone course. Creating industrial real estate, office space, shopping centers, and hotel/recreation facilities, including strategy, market and feasibility analysis, site planning/design, capital cost analysis, construction and financial structuring. Emphasis on case studies and project analysis.

**Requisites:** REAL EST 710 and 715

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 760 – LAWYERING THE DEVELOPMENT DEAL: A PRACTICAL GUIDE TO REAL ESTATE LAW**

3 credits.

A working knowledge of real estate law is an important underpinning of a successful real estate career. In this course, we will analyze current issues in real estate law with respect to the acquisition, leasing, financing, and development of real estate projects. While we will take a big picture view of these topics, we also will analyze them in the specific context of Rethke Terrace, a supportive housing project recently developed in the City of Madison. We will conclude the semester with an exploration of the art of negotiation.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**REAL EST 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**REAL EST 770 – COMMERCIAL REAL ESTATE FINANCE**

3 credits.

A capstone focused on advanced topics in commercial real estate finance. The course is broken into three parts: 1) Financial Derivatives, 2) Risk Management, and 3) Structured Finance. Lectures will address relevant topic areas and develop methodological skills. Industry professionals will provide real world markets perspective. case studies will be used to reinforce material presented in class.

**Requisites:** Graduate standing and REAL EST 710

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**REAL EST 799 – READING AND RESEARCH-URBAN LAND ECONOMICS**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged both during regular sessions and the intersession periods.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**REAL EST 841 – APPLIED REAL ESTATE INVESTMENT TRACK (AREIT) I**

6 credits.

Focuses on investment processes, guidelines, governance, underwriting, company valuation, sector analysis and portfolio analysis. Allows selected students to function as portfolio managers by investing real money (endowment to the real estate program) in listed real estate companies, primarily real estate investment trusts (REITs).

**Requisites:** Graduate/professional standing, (REAL EST 410 or 710), and REAL EST 540, or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**REAL EST 842 – APPLIED REAL ESTATE INVESTMENT TRACK (AREIT) II**

3 credits.

An additional experiential learning in the areas of investment processes, guidelines, governance, underwriting, and portfolio analysis. Selected students will function as portfolio managers by investing real money (endowment to the real estate program) in listed real estate companies, primarily real estate investment trusts (REITs).

**Requisites:** REAL EST 841**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**REAL EST 851 – PRIVATE REAL ESTATE EQUITY INVESTMENT II: UNDERWRITING AND INVESTMENT PROCESSES**

6 credits.

Focuses on the real estate private equity organization through constructing investment criteria statements, vetting investment opportunities, implementing investment processes, and presenting the opportunities to the WREAA Fund Investment Committee.

**Requisites:** Graduate/professional standing and REAL EST 550, or declared in graduate Business Exchange program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**REAL EST 852 – PRIVATE REAL ESTATE EQUITY INVESTMENT III: GUIDELINES, GOVERNANCE, AND PORTFOLIOS**

3 credits.

Focuses heavily on building the investment pipeline, analyzing and underwriting new real estate private placement investments, understanding the governance structures, and benchmarking Fund investment returns to industry standards. Investments opportunities that meet investment criteria expectations will be presented to an external Investment Committee of the Wisconsin Real Estate Alumni Association.

**Requisites:** REAL EST 851**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**REAL EST 870 – ADVANCED REAL ESTATE FINANCE THEORY**

3 credits.

An overview of theoretical and empirical research on real estate, with a focus on real estate finance. The topics covered are intended to expose some of the major contributions in real estate research as well as a consideration of the current trends and methodological advances in recent papers.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**REAL EST 875 – ADVANCED URBAN LAND ECONOMICS**

3 credits.

Provides an overview of theoretical and empirical research on real estate and urban economics, with a focus on asset liquidity and place-based policies.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**REAL EST 978 – RESEARCH SEMINAR IN REAL ESTATE AND URBAN LAND ECONOMICS**

1 credit.

Explore cutting-edge research on urban economics and real estate being conducted across different universities. Invited speakers will describe current or past research, identify challenges involved in their work, and highlight research conceptualization, approaches, methods, and/or data analysis, to better understand how to execute a research project.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, for 5 number of completions**Last Taught:** Spring 2023**REAL EST 990 – REAL ESTATE INDEPENDENT RESEARCH PHD THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**REAL EST 999 – READING AND RESEARCH-REAL ESTATE PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged both during regular sessions and during the intersession periods.

**Requisites:** Declared in Business PHD**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022

## REHABILITATION MEDICINE (RHAB MED)

**RHAB MED 699 – INDEPENDENT STUDY**

0-5 credits.

Independent study projects as arranged with faculty or instructional staff.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

### **RHAB MED 919 – INDIVIDUALIZED FOURTH YEAR CLINICAL CLERKSHIP**

1-12 credits.

Individually arranged fourth year clinical clerkships. (Student must have Fourth Year Committee approval to count for fourth year credit.)

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RHAB MED 920 – REHABILITATION MEDICINE CLINICAL ELECTIVE**

2-4 credits.

Inpatient hospital setting and outpatient clinical setting. Direct supervision by attending physicians and residents. Inpatient activities include rounding on rehabilitation medicine service patients, observing patient therapy sessions, discussing patient cases. Outpatient activities includes seeing clinic patients, participating in procedures like joint injections and fluoroscopic-guided spinal injections, performing electromyography (EMG), discussing patient cases. Evaluate and manage a full spectrum of patients with neurologic and musculoskeletal issues. Exposure to multiple disciplines involved in the rehabilitation process. Inpatient diagnoses commonly encountered include stroke, brain injury, spinal cord injury, orthopedic injuries, debility, amputations. Outpatient diagnoses commonly encountered include developmental disabilities, spine disorders, chronic pain, arthritis, myofascial pain and fibromyalgia, spasticity, and chronic conditions from prior neurologic injuries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

### **RHAB MED 923 – PHYSICAL MEDICINE AND REHABILITATION-MARSHFIELD**

2-12 credits.

Clinical elective for fourth year medical students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **REHABILITATION PSYCHOLOGY AND SPECIAL EDUCATION (RP & SE)**

### **RP & SE 100 – DISABILITY AND SOCIETY**

3 credits.

Provides introductory and interdisciplinary life-span perspectives on disability, relevant for both education and non-education majors. Introduces theoretical, cultural, and political models of disability and explores the lived experiences of persons with disabilities (or people who are perceived to have disabilities) in society.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 121 – DISABILITY AND SUBSTANCE ABUSE**

3 credits.

Designed to provide an entry-level overview of disability under federal legislation and regulation, substance use and abuse among persons with disabilities as either a primary or secondary disability, the physical, psychological, and socio-cultural effects of drugs, and the impact substance abuse or dependence has on the capacity of individuals with disabilities to live independently, work, and otherwise engage in a full range of life activities.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 125 – HEALTH AND REHABILITATION PROFESSIONS**

3 credits.

An exploration of various health and rehabilitation professions within the United States health care system, including educational requirements, professional expectations, and practice sites. Consideration is given to career planning in health and rehabilitation professions with review of current employment opportunities and workforce trends.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE/LEGAL ST 135 – DISABILITY AND THE CRIMINAL JUSTICE SYSTEM**

3 credits.

Explores the interaction between the criminal justice system and disability. Explores common experiences of persons with disability such as limited access to community services, poverty, and homelessness and the connection of these experiences to mass incarceration. Explores federal disability rights laws and the implementation of these laws in education, legal, and incarceration settings. Introduction to criminal justice reform to address the experiences of persons with disabilities in this system.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**RP & SE 200 – ISSUES IN SPECIAL EDUCATION**

3 credits.

Designed for learning about special education, particularly related to careers in this field. Provides information on the history and evolution of special education and special educators' roles.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Fall 2022**RP & SE 210 – THE DISABILITY EXPERIENCE**

3 credits.

Introduction to the modern disability experience, with an emphasis on disability justice and advocacy. Examines the societal implications and individual experiences of disability, centering the voices of individuals with disabilities themselves, and discusses strategies that can be used to work toward their full participation and inclusion in society.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RP & SE 300 – INDIVIDUALS WITH DISABILITIES**

3 credits.

Designed to expand the knowledge base of future educators, clinicians, and society members to better understand and serve the diverse needs and interests of individuals with disabilities. Introduces the concept of disability as well as the field of special education. The history, etiology, and characteristics of specific categories of disability are examined, as are educational and other federally mandated programs designed to address the needs of both children and adults with disabilities. Topics germane to the study of disability and the field of special education are explored.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RP & SE 310 – POSITIVE PSYCHOLOGY AND WELL BEING**

3 credits.

Introduction to positive psychology, or the science of human strengths, mental health, and well-being. Covers theory and current research on positive psychology including concepts of optimism, flow, gratitude, and purpose in life. Positive psychology concepts are discussed within the context of health promotion, with an emphasis on minimizing the impact of illness and disability. Learn to apply positive psychology concepts in personal and professional contexts to cultivate fulfilling, healthy, and meaningful lives.

**Requisites:** Sophomore standing**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RP & SE 316 – HEALTH PROMOTION FOR INDIVIDUALS WITH DISABILITY AND CHRONIC ILLNESS**

3 credits.

Addresses theories and research related to health psychology, health behavior and quality of life. Focus on understanding models of healthy lifestyle interventions, assessment/intervention strategies for health promotion, factors affecting health behavior, public health initiatives. Attention is given to application of practical tools for promoting health and preventing secondary conditions for individuals with disabilities and chronic illness.

**Requisites:** Declared in Rehabilitation Psychology, Health Promotion and Health Equity, or classified as Pre-Rehabilitation Psychology or Pre-Special Education

**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RP & SE 320 – INTRODUCTION TO TEACHING IN SPECIAL EDUCATION**

3 credits.

Provides an overview of teaching in early childhood and K-12 special education and introduces the content of and highlights the underlying themes (e.g., inclusion, collaboration) embedded in teacher preparation courses required for licensing in early childhood special education and K-12 special education.

**Requisites:** Declared in Special Education BSE, Elementary Education and Special Education BSE, or Special Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**RP & SE 325 – SELF MANAGEMENT OF CHRONIC ILLNESS AND DISABILITY**

3 credits.

Provides knowledge and understanding of concepts of self-management of chronic illness and disability using both theoretical and empirically-based approaches. Includes discussion of collaboration among healthcare providers in helping individuals manage symptoms of their chronic health conditions, condition-specific education about the typical symptoms and advice about the decisions and actions that the individual with the chronic health condition can take when those symptoms occur, and coping skills that can be facilitated to address the emotional reactions and stress related to chronic health conditions.

**Requisites:** Declared in Health Promotion and Health Equity BS or Rehabilitation Psychology BS

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 330 – BEHAVIOR ANALYSIS: APPLICATIONS TO PERSONS WITH DISABILITIES**

3 credits.

Children with exceptional learning and behavior characteristics (contrasting views and practices); a humanistic behavioral approach; development and evaluation of behavior change programs, classification and foundations of exceptional learning and behavior characteristics, and facilitating behavior change in different settings.

**Requisites:** RP & SE 300 and declared in Rehabilitation Psychology, Special Education, Disability Rights and Services Certificate, Special Education MS or classified as Pre-Rehabilitation Psychology or Pre-Special Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 335 – INTRODUCTION TO SPORT PSYCHOLOGY**

3 credits.

Examines the psychological factors that influence participation in sport and exercise. Theories and interventions used to understand and enhance performance will be examined. Additionally, mental health, substance use and transition out of sport will be reviewed.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 355 – REMOTE SERVICE PROVISION STRATEGIES FOR HEALTH AND REHABILITATION PROVIDERS**

3 credits.

Explore the use of technology to provide evaluation, consultation, and services to the community. Study the creation and use of telecounseling and other remote strategies to provide services that are accessible to individuals unable to receive care in a traditional office setting. Introduce technology for remote service provision and a foundational knowledge to effectively integrate this service modality as this practice evolves.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**RP & SE/CURRIC 365 – TEACHING MATHEMATICS IN INCLUSIVE SETTINGS**

3 credits.

Introduction to a variety of approaches for teaching mathematics to students in inclusive schools

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 405 – CURRENT TOPICS IN SPECIAL EDUCATION**

1 credit.

Explores current issues, topics, and trends in special education.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**RP & SE/CURRIC 406 – RACE, INTERSECTIONALITY, AND EQUITY IN EDUCATION**

3 credits.

Addresses a range of issues to help teachers more thoughtfully and equitably serve their students of color and develop a critical and historical understanding of the racism, marginalization, and exclusion that is endemic to the U.S. public school system. Provides an overview of foundational constructs that are essential for pre-service teachers preparing to teach and serve diverse students and families. Explore how race, racism, and racialization in education intersect with class, gender, dis/ability, religion, sexuality, etc. to shape inequitable schooling conditions and experiences for students of color. Analyze the effects at the individual, interactional, institutional, and societal levels. Consider how power always-already enables particular policies and practices that reproduce educational inequities and hence sustain white privilege and dominance.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 435 – OVERVIEW OF EARLY CHILDHOOD SPECIAL EDUCATION**

3 credits.

An introduction to the Early Childhood Special Education profession including historical, philosophical, social and psychological foundations, awareness of values, ethical and legal issues, staff relations, and the importance of becoming an advocate for children and families. Analyze trends in early education, including diversity, early intervention, early childhood special education, family centered practices, legislation, public policy, and developmentally appropriate practice.

**Requisites:** Declared in Special Education: Early Childhood Special Education/Special Education Dual Certification Birth-Grade 12 BSE, Special Education: Early Childhood Special Education Birth-Grade 3 BSE, or Certificate in Disability Rights and Services

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 445 – SPECIAL EDUCATION PRACTICUM: EARLY ADOLESCENCE THROUGH ADOLESCENCE**

3-6 credits.

Approved placement with a qualified cooperating teacher serving students with disabilities in any of grades 6-12, supervised by a qualified university supervisor. Includes observation and supervised practice in the field of special education and discussion focusing on reflection and application of special education theories to practical settings.

**Requisites:** Declared in the Special Education BSE or Special Education: Teacher Certification MS

**Course Designation:** Workplace - Workplace Experience Course  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**RP & SE 455 – EARLY CHILDHOOD SPECIAL EDUCATION METHODS: INCLUSIVE STRATEGIES FOR INFANTS AND TODDLERS**

3 credits.

Explore instructional approaches and practices that support developmentally appropriate, effective, and inclusive early childhood education and evidenced-based intervention for infants and toddlers (i.e., birth-3 years old). Learn strategies to support access to the general education curriculum, participation, and achievement of young children with developmental delays and disabilities. Examines "what" to teach, the selection of developmentally- and individually-appropriate child goals and objectives, and "how" to teach, the practical components of developing and delivering effective, evidenced based instruction and intervention. Emphasis on adapting general early childhood education curriculum and practices in order to support children's individualized goals within inclusive classrooms. Addresses planning and implementing instruction in alignment with state and federal mandates.

**Requisites:** Declared in Special Education: Early Childhood Special Education/Special Education Dual Certification Birth-Grade 12 or Special Education: Early Childhood Special Education Birth-Grade 3 BSE

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 457 – ELEMENTARY STUDENT TEACHING SEMINAR - ELEMENTARY/SPECIAL EDUCATION DUAL MAJOR**

1 credit.

Addresses professionalism, research and problem solving, assessment, and collaborative skills relevant to the elementary and special education student teaching placement.

**Requisites:** Declared in Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 460 – EARLY CHILDHOOD SPECIAL EDUCATION METHODS: INCLUSIVE STRATEGIES FOR PRESCHOOL AND EARLY ELEMENTARY**

3 credits.

Covers instructional approaches and practices that support developmentally appropriate, effective, and inclusive early childhood education and evidenced-based intervention for preschool and early elementary-age children (i.e., 3-8 years old). Focuses on strategies for supporting access to the general education curriculum, participation, and achievement of young children with developmental delays and disabilities. Learn "what" to teach, the selection of developmentally- and individually-appropriate child goals and objectives, and "how" to teach, the practical components of developing and delivering effective, evidenced based instruction and intervention. Emphasis is placed on adapting general early childhood education curriculum and practices in order to support children's individualized goals within inclusive classrooms. Addresses planning and implementing instruction in alignment with state and federal mandates.

**Requisites:** Declared in Special Education: Early Childhood Special Education/Special Education Dual Certification Birth-Grade 12 or Special Education: Early Childhood Special Education Birth-Grade 3 BSE

**Repeatable for Credit:** No

**RP & SE 464 – DIAGNOSIS, ASSESSMENT, AND INSTRUCTIONAL PLANNING IN SPECIAL EDUCATION**

3 credits.

Introduction to assessment terms and tools used to assist in the identification and diagnosis of students with disabilities; provide the skills necessary to collect and use assessment data to promote the successful outcomes in core academic instruction for students with disabilities.

**Requisites:** Declared in Special Education, Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert or Special Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 465 – LANGUAGE AND READING INSTRUCTION FOR STUDENTS WITH DISABILITIES**

3 credits.

Designed to prepare future special educators to plan and provide language and reading instruction to a broad range of students with disabilities.

**Requisites:** Declared in Special Education, Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert or Special Education MS

**Course Designation:** Gen Ed - Communication Part B

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**RP & SE 466 – DIVERSITY IN SPECIAL EDUCATION**

3 credits.

Provides an overview of the context and unique considerations for providing special education services to culturally and linguistically diverse learners and their families. Upon completion, describe the diversity of students who receive special education services, including trends over time, and identify deficit orientations toward diversity, culture and disability that limit youths' opportunities to learn.

**Requisites:** Declared in Special Education BSE, Special Education MS, Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert, or Disability Rights and Services Certificate

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 467 – ELEMENTARY STUDENT TEACHING SEMINAR**

2 credits.

Addresses professionalism, research and problem solving, assessment, and collaborative skills relevant to the elementary special education student teaching placement.

**Requisites:** Declared in Special Education, Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert or Special Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 468 – SECONDARY STUDENT TEACHING SEMINAR**

2 credits.

Addresses professionalism, research and problem solving, assessment, and collaborative skills relevant to the secondary special education student teaching placement.

**Requisites:** Declared in Special Education, Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert or Special Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 472 – METHODS IN TRANSITION AND VOCATIONAL EDUCATION**

3 credits.

Provides information and methods necessary to provide individualized programming in transition and vocational education for students with disabilities, grades six through twelve.

**Requisites:** Declared in Special Education, Elementary Education: Middle Childhood Through Early Adolescence/Special Education Dual Cert or Special Education MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 473 – CLASSROOM MANAGEMENT FOR INCLUSIVE CLASSROOMS**

3 credits.

Focus on theories and practices to promote positive, proactive, and culturally responsive management of K-12 inclusive classrooms. Topics covered include multi-tiered systems of support, functional behavior assessment, and behavioral intervention plan.

**Requisites:** Declared in Special Education BSE, Special Education MS, or Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 475 – SPECIAL EDUCATION PRACTICUM: EARLY CHILDHOOD AND ELEMENTARY**

3-6 credits.

Practicum teaching in an approved placement with a qualified cooperating teacher serving students with disabilities birth through grade 9, supervised by a qualified university supervisor. Placement schedule determined by course instructor.

**Requisites:** Declared in Special Education BSE, Elementary Education: Kindergarten - 9th Grade/Special Education Kindergarten - 12th Grade Dual Certification or Special Education: Teacher Certification MS

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**RP & SE 476 – SPECIAL EDUCATION PRACTICUM: SECONDARY (GRADES 4-12)**

1-9 credits.

Practicum teaching in an approved placement with a qualified cooperating teacher serving students with disabilities in any of grades 4-12, supervised by a qualified university supervisor. Placement schedule determined by course instructor.

**Requisites:** Declared in Special Education BSE, Special Education MS, or Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Course Designation:** Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 477 – SPECIAL EDUCATION STUDENT TEACHING: ELEMENTARY (PK - GRADE 9)**

6-12 credits.

Full time student teaching in an approved placement with a qualified cooperating teacher serving students with disabilities in any of grades PK-Grade 9, supervised by a qualified university supervisor. Placement schedule follows the host school district calendar.

**Requisites:** Declared in Special Education BSE, Special Education MS, or Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Course Designation:** Workplace - Workplace Experience Course  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 478 – SPECIAL EDUCATION STUDENT TEACHING: SECONDARY (GRADES 4-12)**

6-12 credits.

Full time student teaching in an approved placement with a qualified cooperating teacher serving students with disabilities in any of grades 4-12, supervised by a qualified university supervisor. Placement schedule follows the host school district calendar.

**Requisites:** Declared in Special Education BSE, Special Education MS, or Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Course Designation:** Workplace - Workplace Experience Course  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 500 – REHABILITATION-COUNSELING PSYCHOLOGY: FOUNDATIONS**

3 credits.

History, philosophy, principles, legislation, and development of vocational rehabilitation; organizational structure and objectives of the principal community agencies.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 501 – REHABILITATION-COUNSELING PSYCHOLOGY: APPLICATIONS**

3 credits.

Introduction to rehabilitation and human service programs for people with disabilities and other special needs. Emphasis on communication relevant to professional service, particularly writing.

**Requisites:** Declared in Rehabilitation Psychology and concurrent enrollment in RP & SE 630

**Course Designation:** Gen Ed - Communication Part B

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 505 – BIOLOGICAL, PSYCHOSOCIAL, AND VOCATIONAL ASPECTS OF DISABILITIES**

3 credits.

Provides an overview of disabilities with an emphasis on biological, psycho-social, and vocational aspects.

**Requisites:** RP & SE 125 or 325

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE/CURRIC 506 – STRATEGIES FOR INCLUSIVE SCHOOLING**

3 credits.

Comparison of historical and current practices in special education; legal, philosophical, and programmatic changes leading to inclusive models of education; emphasis on concepts of collaboration, cooperative learning structures, and curricular and instructional adaptations to accommodate learners with disabilities in general education classrooms.

**Requisites:** Sophomore standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 510 – PARTNERING WITH FAMILIES AND OTHER PROFESSIONALS IN EARLY CHILDHOOD SPECIAL EDUCATION**

3 credits.

Provides the knowledge and skills to implement federal and state mandates as well as professional organization recommendations for special education and related services programs. Explores collaboration in schools, community systems and families, family functioning, historical perspectives of family life and school involvement, effective relationships between home, school, community, communication among professionals and with families, school-based programs as well as multicultural considerations including those related to race, ethnicity, gender, language, and culture, among others. Gain knowledge of family-centered practices and family systems theory to develop and maintain reciprocal partnerships with families. Apply family capacity-building practices to support families to make informed decisions and advocate for their young children.

**Requisites:** Declared in Special Education: Early Childhood Special Education/Special Education Dual Certification Birth-Grade 12 BSE, Special Education: Early Childhood Special Education Birth-Grade 3 BSE, or Certificate in Disability Rights and Services

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 515 – ACCESS TO THE GENERAL CURRICULUM FOR STUDENTS WITH DISABILITIES**

3 credits.

Prepares special educators to develop curriculum for students with disabilities aligned with general education content. Identifying appropriate Individualized Education Plan goals, supplementary aids and services, and service coordination in inclusive school contexts will be emphasized. Activities will cover three main topics, which will be woven through our activities, class readings, and assignments throughout the semester. These topics are: (a) planning supports for inclusion and access throughout the school day; (b) developing meaningful grade- and standards-aligned Individualized Education Plans; and (c) teaching and adapting general curriculum content.

**Requisites:** Declared in Special Education BSE, Special Education MS, or Elementary Education BSE: Middle Childhood Through Early Adolescence/Special Education Dual Cert

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **RP & SE 520 – CASE MANAGEMENT AND COMMUNITY RESOURCES**

3 credits.

Provides an introduction to the concepts and processes of case management, including case planning, service coordination, referral to and utilization of other disciplines, and client advocacy; and integrating community resources and services for rehabilitation planning with persons with disabilities. Emphases on the basic principles of supporting persons with disabilities within clinical and service systems. Fosters knowledge and understanding of how theories and research translate into appropriate case management practices and explores the case management roles and processes involved in integrated, interdisciplinary, and community service settings.

**Requisites:** RP & SE 125, 316, or PSYCH 202

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 535 – INTRODUCTION TO FORENSIC REHABILITATION**

3 credits.

Overview of the roles and functions of rehabilitation professionals who provide services and expert testimony in matters of litigation, such as worker's compensation, personal injury, product liability, medical/professional malpractice, catastrophic injury, and others. Ethical standards, practices, and common situations found in the litigation process.

**Requisites:** RP & SE 125 or 325

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **RP & SE 560 – PSYCHOSOCIAL ASPECTS OF CHRONIC ILLNESS AND DISABILITY**

3 credits.

Provides a Bio-psycho-social approach to the dynamics of coping and adjustment to disability and chronic illness and investigates the effects of prevailing societal attitudes towards persons with disabilities and strategies for attitude change.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **RP & SE 605 – DEVELOPMENT, LEARNING AND EDUCATION FOUNDATIONS IN SPECIAL EDUCATION**

3 credits.

Key issues and trends in special education today are examined in detail. These issues and trends are discussed within the context of ecological models of human development. Gain knowledge about child and adolescent development within the contexts of families, peer groups, schools, and communities. Apply this knowledge to teaching and practice linking these to current concepts and issues in the field. Examines the role of education and educators in providing effective supports and services to promote student learning and well-being, considering the "whole child". Gain awareness, knowledge and skills to be critical thinkers, effective educators, and leaders in the field of education including special education. Although much of what is covered will have clear implications for intervention and practice, this is not a methods or techniques course with a "how to" focus.

**Requisites:** Declared in Art Education BS, Special Education: Teacher Certification MS, Library and Information Studies graduate programs, or Elementary Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **RP & SE 630 – INTERNSHIP IN REHABILITATION OR SPECIAL EDUCATION**

2-6 credits.

Practicum experience in state or community agencies or in public school programs serving individuals with physical, cognitive, emotional, learning, social or behavioral problems.

**Requisites:** Declared in Rehabilitation Psychology, Special Education, Elementary Education: Middle Childhood through Early Adolescence/ Special Education Dual Cert, or Special Education graduate program

**Course Designation:** Workplace - Workplace Experience Course  
Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RP & SE 660 – SPECIAL TOPICS**

1-6 credits.

An individualized approach in a variety of settings to learning problems encountered by those working with the atypical.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RP & SE 690 – RESEARCH OR THESIS**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **RP & SE 699 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RP & SE 700 – RESEARCH METHODS IN REHABILITATION, MENTAL HEALTH, & SPECIAL EDUCATION**

3 credits.

Research and program evaluation methods and understanding of published research in clinical rehabilitation counseling, mental health counseling, and special education settings.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

### **RP & SE 710 – MULTICULTURAL ISSUES IN SPECIAL EDUCATION**

3 credits.

Designed to engage in an exploration and discussion of issues and trends in special education as relates to the diversity of populations, based on race/ethnicity, socioeconomic backgrounds, disability label, gender, language dominance, etc., receiving special education.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **RP & SE 715 – EQUITY AND FULL PARTICIPATION FOR INDIVIDUALS WITH SIGNIFICANT DISABILITIES**

3 credits.

Analysis of historical and contemporary trends and issues pertaining to persons with significant disabilities (i.e., significant intellectual disability, multiple disabilities, and autism spectrum disorder) across the lifespan. Topics include: an overview of the field of significant disabilities, historical trends, and current directions in curriculum design for students with significant disabilities, and valued outcomes for persons with significant disabilities.

**Requisites:** Declared in Special Education graduate program, Clinical Rehabilitation Counseling, or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

### **RP & SE/COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA 719 – INTRODUCTION TO QUALITATIVE RESEARCH**

3 credits.

Provides an overview of qualitative inquiry, examining assumptions, standards, and methods for generating and communicating interpretations. Methodological and theoretical works illustrate case study, ethnography, narrative, and action research. Does not include a field method component.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 720 – CLINICAL REHABILITATION & MENTAL HEALTH COUNSELING - ASSESSMENT**

3 credits.

Psychometric theory and statistics and testing and assessment procedures in clinical rehabilitation and mental health counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling, Counseling, or Rehabilitation Counselor Education graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 721 – ADDICTIONS COUNSELING**

3 credits.

Provides an overview of the evidence-based practices and common practices for the treatment of addiction disorders. Emphasis is placed on training of the interventions used in the treatment of substance abuse and dependence.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RP & SE 725 – CLINICAL REHABILITATION COUNSELING - CAREER DEVELOPMENT & INTERVENTIONS**

3 credits.

Career development and related interventions in clinical rehabilitation counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE/COUN PSY/PSYCH 729 – ADVANCED SOCIAL PSYCHOLOGY**

3 credits.

Intensive examination of theoretical conceptions in contemporary social psychology, including learning-theoretic, reinforcement, incentive, cognitive, and psychodynamic approaches, and research in selected topic areas reflecting these approaches, such as aggression, attitude formation and change, conformity, limitation and modeling, interpersonal attraction, perception of others, prosocial behavior, and social influence.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**RP & SE/COUN PSY 730 – PROFESSIONAL COUNSELING ORIENTATION**

3 credits.

Provides a broad understanding of professional counselor roles and functions. Also provides a broad understanding of the ethical and legal standards for professional counselors. Gain familiarity with the ACA Code of Ethics, as well as with credentialing standards and organizations relevant to the practice of mental health counseling.

**Requisites:** Declared in a Rehabilitation Psychology or Counseling Psychology graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**RP & SE 732 – CLINICAL REHABILITATION COUNSELING - FOUNDATIONS**

3 credits.

History, development, principles, and theories and models of clinical rehabilitation counseling and psychosocial theory and research relevant to disability.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**RP & SE 735 – LEGAL & ETHICAL BASES OF COUNSELING**

3 credits.

Legal and ethical issues for counselors, with an emphasis on the American Counseling Association (ACA) and Commission on Rehabilitation Counselor Certification (CRCC) ethics codes and Wisconsin statutes relevant to counseling practice and research.

**Requisites:** Declared in Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**RP & SE/COUN PSY/ED PSYCH 736 – SEMINAR IN PSYCHOLOGY OF INDIVIDUAL DIFFERENCES**

3 credits.

Seminar in the psychology of individual differences, providing broad and general coverage of theory and research related to individual and cultural differences.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**RP & SE/COUN PSY/ED PSYCH 737 – SEMINAR IN HISTORY AND SYSTEMS OF PSYCHOLOGY**

3 credits.

Seminar in the history of psychology, providing broad and general coverage of the development of psychology as a scientific discipline. Includes coverage of philosophy of science and systems of psychological inquiry, with applications to current research in psychology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Summer 2022**RP & SE 741 – COMPUTER SOFTWARE AND QUALITATIVE DATA ANALYSIS**

3 credits.

Provides an opportunity to gain knowledge and skill for coding and analyzing qualitative data using NVivo, a qualitative analysis software package. Qualitative data includes audio, video, and visual artifacts and representations collected and created through interviews, document reviews, memos, and observation. Bring data and work through analytic exercises following an individualized path to assignment completion.

Readings and discussions will focus on epistemic perspective and analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**RP & SE 750 – CLINICAL REHABILITATION COUNSELING - MEDICAL & PSYCHOSOCIAL ASPECTS**

3 credits.

Medical and psychosocial information regarding chronic illnesses and disabilities in clinical rehabilitation counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**RP & SE 777 – EDUCATING STUDENTS IN ALTERNATIVE SETTINGS**  
3 credits.

Examines influences on the provision of high quality educational services to students who are confined, committed or selectively placed in alternative settings. For the purpose of this course, alternative settings will be defined as juvenile correctional facilities, day treatment and residential schools, and other non-traditional special schools for students with emotional and behavioral needs. Theoretical and historical perspectives on the role of educators and academic instruction in alternative settings will also be explored.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**RP & SE 780 – INTRODUCTION TO RESEARCH IN SPECIAL EDUCATION**  
3 credits.

Introduction to research in the field of special education and provides an opportunity to acquire knowledge related to research methodology, gain competencies in critically consuming research, and spark interests in conducting action research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**RP & SE/COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA 788 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS I**  
3 credits.

Introductory field methods experience in qualitative research. Learn to define good research questions, determine which methods of data collection and analysis are useful for addressing those questions, engage in these methods, reflect on their utility in education research.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSY/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 719

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE/COUN PSY/CURRIC/ED POL/ED PSYCH/ELPA 789 – QUALITATIVE RESEARCH METHODS IN EDUCATION: FIELD METHODS II**  
3 credits.

Focus on data analysis and translation of finds and implications. Gain theoretical and practical knowledge and skills regarding coding and analysis techniques, use of qualitative analytic tools, strategies for sharing findings with audiences beyond research team.

**Requisites:** CURRIC/ED POL/RP SE/COUN PSYCH/ELPA/ED PSYCH/COUN PSY/CURRIC/ED POL/ELPA/RP & SE 788

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 810 – CLINICAL REHABILITATION COUNSELING - COUNSELING TECHNIQUES**  
3 credits.

Basic counseling skills and techniques in clinical rehabilitation counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 820 – CLINICAL REHABILITATION COUNSELING - COUNSELING THEORIES**  
3 credits.

Theories of counseling and related interventions in clinical rehabilitation counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 830 – CLINICAL REHABILITATION COUNSELING - DIAGNOSIS & TREATMENT PLANNING**  
3 credits.

Diagnostic assessment and planning of treatment, interventions and services in clinical rehabilitation counseling, including both clinical and career and work-related assessments and interventions, in addition to advocacy.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE/ELPA 835 – LEADERSHIP FOR INCLUSIVE SCHOOLING**  
3 credits.

Examines historical and organizational context of special education administration at the federal, state and local levels. Includes policy implementation, constituency management, coordination, communication, and current issues.

**Requisites:** ELPA 735

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**RP & SE 840 – CLINICAL REHABILITATION COUNSELING – GROUP COUNSELING**

3 credits.

Theory and technique in group counseling in clinical rehabilitation counseling practice.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE/ED POL/ED PSYCH/ELPA 842 – LEGAL FOUNDATIONS OF SPECIAL EDUCATION AND PUPIL SERVICES**

3 credits.

Legal requirements and issues relative to special education and pupil services programs; special education, juvenile justice, programs for English language learners, programs for children who are homeless; examination of applicable federal and state statutes and case law.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 860 – REHABILITATION COUNSELING PSYCHOLOGY-CLINICAL PRACTICE SEMINAR**

1 credit.

Concurrent seminar for clinical practice students in RP & SE 880, 890, and 900 or 910.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RP & SE 870 – REHABILITATION COUNSELOR EDUCATION - ASSESSMENT THEORY & RESEARCH**

3 credits.

Review of research and scholarly literature on theory, models, and methods of assessment; and research priorities, approaches, and methods to improving assessment practices in clinical rehabilitation counseling.

**Requisites:** Declared in Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**RP & SE 871 – FOUNDATIONS OF SPECIAL EDUCATION**

3 credits.

Engage participants in a critical exploration of Special Education issues and trends as located in social, cultural, philosophical, and historical contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RP & SE 872 – SEMINAR IN SPECIAL EDUCATION RESEARCH**

3 credits.

Equips the knowledge and skills necessary to be thoughtful critically consumers and producers of education and special education research. Designed to: (a) provide an overview of the variety of research methods and approaches typically used in special education and the utility of these methods and approaches in addressing educational problems and issues; (b) critically appraise published peer-reviewed research in special education; (c) develop the skills necessary to summarize, synthesize and expand upon research already conducted on topics of personal and professional relevance; and (d) communicate research ideas, findings, and implications for practice and future research to a variety of audiences in an effective and professional manner.

**Requisites:** RP & SE 871

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RP & SE 873 – PROFESSIONAL DEVELOPMENT FOR FUTURE SPECIAL EDUCATION RESEARCHERS AND FACULTY IN HIGHER EDUCATION**

1 credit.

Provides information and professional development on careers in academia. Designed for students to take multiple times to correspond to their developmental needs and professional development.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**RP & SE 880 – CLINICAL REHABILITATION COUNSELING - SUPERVISED PRACTICUM I**

3 credits.

Supervised experience in clinical rehabilitation counseling practice (beginning).

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

### **RP & SE 890 – CLINICAL REHABILITATION COUNSELING - SUPERVISED PRACTICUM II**

3 credits.

Supervised experience in clinical rehabilitation counseling practice (intermediate).

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **RP & SE 900 – CLINICAL REHABILITATION COUNSELING - SUPERVISED PRACTICUM III**

3 credits.

Supervised experience in clinical rehabilitation counseling practice (advanced).

**Requisites:** Declared in Rehabilitation Counselor Education graduate program and completion of RP SE 880 and 890

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

### **RP & SE 903 – REHABILITATION COUNSELOR EDUCATION - PSYCHOSOCIAL THEORY & RESEARCH**

3 credits.

Review of theory and research on psychosocial aspects of chronic illness and disability; and research priorities, approaches, and methods to improving understanding of psychosocial factors in clinical rehabilitation counseling.

**Requisites:** Declared in Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **RP & SE 910 – CLINICAL REHABILITATION COUNSELING - INTERNSHIP**

6-12 credits.

Full-time supervised experience in clinical rehabilitation counseling.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **RP & SE 920 – REHABILITATION COUNSELOR EDUCATION - COUNSELING SUPERVISION**

3 credits.

Supervised experience with concurrent instruction in the individual and group supervision of practicum students in Clinical Rehabilitation Counseling.

**Requisites:** Declared in Rehabilitation Counselor Education

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **RP & SE 921 – INTERNSHIP: ADVANCED PROFESSIONAL PRACTICES**

1-3 credits.

Field work in therapeutic intervention, organization and administration, and clinical needs assessment within various special education service delivery settings. Opportunity to relate relevant theoretical backgrounds to clinical organization and field problems.

**Requisites:** Declared in Rehabilitation Counselor Education or Special Education PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

### **RP & SE/COUN PSY 925 – SEMINAR IN COUNSELING PSYCHOLOGY**

3 credits.

History, ethical and professional issues and problems, and current status of the psychological specialty of counseling psychology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **RP & SE 930 – REHABILITATION COUNSELOR EDUCATION - TEACHING**

3 credits.

Supervised experience with concurrent instruction in teaching methods with graduate students in clinical rehabilitation counseling and undergraduates in rehabilitation psychology.

**Requisites:** Declared in Rehabilitation Counselor Education or Special Education PHD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RP & SE 940 – REHABILITATION COUNSELOR EDUCATION - SUPERVISED RESEARCH**

1-3 credits.

Supervised experience in rehabilitation research and scholarship.

**Requisites:** Declared in Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2022**RP & SE 941 – INTERNSHIP: RESEARCH**

1-3 credits.

Supervised participation in conducting, evaluation, and reporting university level research.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**RP & SE 942 – INTERNSHIP IN POSTSECONDARY TEACHING**

3 credits.

Supervised experience with concurrent instruction in teaching methods and development of teaching philosophy with graduate students in special education.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**RP & SE 945 – INTERNSHIP IN REHABILITATION COUNSELOR EDUCATION I**

3 credits.

Supervised experience in counseling and direct service, supervision, teaching, research, and advocacy and leadership.

**Requisites:** Declared in Rehabilitation Counselor Education graduate program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**RP & SE 955 – INTERNSHIP IN REHABILITATION COUNSELOR EDUCATION II**

3 credits.

Supervised experience in counseling and direct service, supervision, teaching, research, and advocacy and leadership.

**Requisites:** RP & SE 945**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**RP & SE 980 – CLINICAL REHABILITATION COUNSELING - ADVANCED ASSESSMENT PRACTICE**

3 credits.

Advanced assessment practices and interpretation of findings in clinical rehabilitation counseling, including the assessment of intelligence, neuropsychological functioning, and personality.

**Requisites:** Declared in Clinical Rehabilitation Counseling or Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**RP & SE 983 – REHABILITATION COUNSELOR EDUCATION - LEADERSHIP & PROFESSIONAL ISSUES**

3 credits.

Leadership theory and practice, history, basic philosophy, and professional issues in clinical rehabilitation counseling and rehabilitation counselor education.

**Requisites:** Declared in Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**RP & SE 984 – REHABILITATION COUNSELOR EDUCATION - COUNSELING THEORY & RESEARCH**

3 credits.

Review of research and scholarly literature on theory, models and methods of counseling and related interventions, research priorities, approaches, and methods to improve counseling practices in clinical rehabilitation counseling.

**Requisites:** Declared in Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**RP & SE 985 – ADVANCED METHODOLOGIES IN DISABILITY & REHABILITATION RESEARCH**

3 credits.

Advanced statistical methods, design, instrumentation, and procedures in research and program evaluation in disability and rehabilitation settings.

**Requisites:** Declared in Rehabilitation Counselor Education**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**RP & SE 988 – REHABILITATION COUNSELOR EDUCATION – DISSERTATION RESEARCH SEMINAR**

1 credit.

Seminar taken in conjunction with RP & SE 990 to facilitate conceptualization, methodology, presentation, writing, and defense of the dissertation proposal and research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RP & SE 990 – RESEARCH OR THESIS**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RP & SE/COUN PSY/ED PSYCH/PSYCH 995 – PREDOCTORAL INTERNSHIP**

0 credits.

Registration for Ph.D. students who have successfully defended the dissertation and are in the process of completing the required predoctoral internship.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RP & SE 999 – INDEPENDENT READING**

1-3 credits.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

# RELIGIOUS STUDIES (RELIG ST)

**RELIG ST 101 – RELIGION IN GLOBAL PERSPECTIVE**

3 credits.

Foundational and thematic approaches in the academic study of religion applied across global religious systems.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**RELIG ST 102 – EXPLORING RELIGION IN SICKNESS AND HEALTH**

3 credits.

An introduction to the study of religion through the lens of health and health through the lens of religion employing approaches from the humanities and social sciences in conversation with health-related disciplines. It asks questions such as, How do religious peoples understand and live in sickness and health? How do people connect physical well-being to spiritual well-being? Medicine to meaning-making? How does looking at religion in sickness and health provide insight into its roles in a variety of cultures and contexts, globally and locally? How do health and religion connect particularly in situations of social marginalization and immigration? How does religion impact understandings of health and sickness beyond the borders of specific religious communities?

**Requisites:** None

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RELIG ST 103 – EXPLORING RELIGION AND SEXUALITY**

3 credits.

An introductory examination of "what religion is" via investigation of how religious traditions imagine, interrogate, and regulate sexuality using several approaches in the discipline of religious studies. Focuses, although not exclusively, on the religions of the Ancient Mediterranean (Greeks, Romans, Rabbinic Jews, and early Christians) and also considers the (re)construction of ideas and practices over time and contexts.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**RELIG ST/FOLKLORE 104 – SACRED PLACES AND JOURNEYS**

3 credits.

An introduction to the study of religion through the lens of sacred places and journeys, including pilgrimage.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**RELIG ST 105 – RELIGION AND POPULAR CULTURE-LOCAL AND GLOBAL**

3 credits.

Introduces religious studies through the lens of popular culture. In recent decades, many have predicted the demise of religion and the "death of God." Indeed, many seem to embrace science and rationality over faith and the supernatural, yet religion, religious language, religious themes permeate popular culture. This raises many questions: What is popular culture? What role is religion playing in it? How can we better understand popular culture using religious studies theory? Explores these questions through theme parks in the U.S. and Japan, Sports, Music, and tattoos.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/HISTORY/MEDIEVAL 112 – THE WORLD OF LATE ANTIQUITY (200-900 C.E.)**

4 credits.

History of the Mediterranean World from the late Roman Empire to the development of distinct European, Byzantine and Islamic civilizations (ca. 200-900 CE). Special attention will be paid to the rise and development of Christianity and Islam.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**RELIG ST/HISTORY 131 – INTRODUCTION TO CHRISTIANITY: JESUS TO THE PRESENT**

4 credits.

Survey of Christianity from its beginnings to its diverse global manifestations today, including beliefs, institutions, ritual, lived experience, and interactions with broader culture and society.

**Requisites:** None**Course Designation:** Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**RELIG ST/CNSR SCI 173 – CONSUMING HAPPINESS**

3 credits.

As the saying goes, money can't buy happiness -- but in modern America, we certainly try. This course will provide an overview of the study of happiness and well-being, examine how consumers engage in consumption in pursuit of happiness, as well as explore the emergence of the experience economy, and the intersection of money and well-being. Students will read academic and popular pieces on positive psychology, prosocial spending and explore the psychology of persuasion in the promises associated with this industry. In addition to integrating visual media, students will have the opportunity to experience first-hand whether the advice works in their own lives.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST 200 – INTRODUCTORY TOPICS IN RELIGIOUS STUDIES (HUMANITIES)**

3-4 credits.

Topics in religious studies in the humanities at an introductory level.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**RELIG ST/JEWISH/LEGAL ST 203 – JEWISH LAW, BUSINESS, AND ETHICS**

3 credits.

Explores the development of Jewish law from antiquity to modernity, with a focus on legal questions related to business practices and ethics. Consider issues ranging from ethical practices in agriculture to how to run a modern multi billion-dollar kosher industry; from the ethics of Jews celebrating Thanksgiving to regulations governing the preparation, consumption, and sale of coffee.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**RELIG ST/HISTORY 205 – THE MAKING OF THE ISLAMIC WORLD: THE MIDDLE EAST, 500-1500**

3-4 credits.

Development of society and culture in the Middle East and North Africa from the emergence of Islam (7th century) to early modern times.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**RELIG ST/ASIAN 206 – THE QUR'AN: RELIGIOUS SCRIPTURE & LITERATURE**

3 credits.

An introduction to the Qur'an, the sacred scripture of the Islamic religious tradition, focused on Muslim approaches to reading the text, its themes and history, and its use as a source of law, theology, aesthetics, politics, and practices of piety.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**RELIG ST/HISTORY 208 – WESTERN INTELLECTUAL AND RELIGIOUS HISTORY TO 1500**

3-4 credits.

Survey of key themes in Western intellectual history and religious thought from ancient Greece through the Renaissance, focusing on relationships among classical, Jewish, and Christian traditions.

**Requisites:** Sophomore standing or 3 credits in HISTORY or RELIG ST**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**RELIG ST/HISTORY 209 – WESTERN INTELLECTUAL AND RELIGIOUS HISTORY SINCE 1500**

3-4 credits.

A survey of major trends in Western intellectual history and religious thought in the modern era, a period that saw a new range of competing ideas about the divine, the human condition, justice and the social order, and the quest for meaning. Explores shifts in Christian and Jewish thought as well as secular alternatives to religious outlooks. Topics include the impact of the Reformation, Scientific Revolution, and Enlightenment; radical critiques of religion; existentialism; theological responses to World Wars and the Holocaust; and civil rights and social justice. Sources include films, novels, autobiographies, essays, theological works, and political manifestos.

**Requisites:** Sophomore standing or 3 credits in HISTORY or RELIG ST**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST/JEWISH 211 – INTRODUCTION TO JUDAISM**

4 credits.

General introduction to Judaism covering the biblical, classical rabbinic, medieval, and modern periods.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**RELIG ST/HISTORY 212 – THE HISTORY OF WESTERN CHRISTIANITY TO 1750**

4 credits.

A survey of Christianity from being a small, persecuted sect in the Roman Empire to becoming the dominant religion of western Europe, penetrating into the lives of Europeans, fissuring into multiple churches, and spreading across the globe. Attention is given to doctrine, ritual, worship, architecture, images, and music.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**RELIG ST/ASIAN 218 – HEALTH AND HEALING IN SOUTH ASIA**

3-4 credits.

Study primary and secondary sources to explore how South Asian societies have understood the ideas of health and well-being throughout history. We will consider a number of cases that illustrate uniquely South Asian conceptions of illness and physical dysfunction and the ways in which people in South Asia have attempted (and continue to attempt today) to heal bodies. Students will learn about the traditional healing systems of South Asia, including Ayurveda, Siddha, and Unani, the basic components of each systems' ideas about disease pathology and treatment that have been used for centuries to heal illness, maintain good health, and, in some instances, aspire to a state of super-health that transcends the limitations of bodily existence altogether.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST/CLASSICS/JEWISH/LITTRANS 227 – INTRODUCTION TO BIBLICAL LITERATURE (IN ENGLISH)**

4 credits.

Introduction to the text, development, history, and social context of the Hebrew Bible/Old Testament. Covers the Torah (Pentateuch), Neviim (Former and Latter Prophets), and Ketuvim (Writings), and provides a brief introduction to early Jewish literature (Pseudepigrapha/Apocrypha). Discusses various methods of analysis and theories of composition. Addresses major theological claims made of the text by Jewish and Christian communities. Explores contextualized interpretations in the ancient and modern day.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**RELIG ST/ILS 234 – GENRES OF WESTERN RELIGIOUS WRITING**  
3 credits.

Explores literary forms through which religions originating in western culture convey ideas. Focuses on Jewish, Christian, Muslim and related religious texts.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**RELIG ST/ASIAN 236 – ASIA ENCHANTED: GHOSTS, GODS, AND MONSTERS**  
3 credits.

Explores how different cultures in Asia conceive of and relate to the monstrous, ghostly, and divine, both in the past and in the contemporary world. These themes are approached from a range of different disciplinary perspectives, including religious studies, literature, anthropology, and history.

**Requisites:** None

**Course Designation:** Gen Ed - Communication Part B

Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/LITTRANS/MEDIEVAL 253 – OF DEMONS AND ANGELS. DANTE'S DIVINE COMEDY**  
3 credits.

Have you ever wondered about human nature? What is our place in this world? Through readings, videos, and original images, explore and discuss Dante's answers from one of the greatest world literary classics, his Divine Comedy. From Hell, through Purgatory to Paradise, we will travel together with Dante in a universal tale of the journey of the human soul. Along the way, learn about Dante, his life and his works, development of literary history, historical and socio-political context of medieval Europe, the Mediterranean and the Middle East. Make connections that cross today's geographic and cultural lines in an exploration of literary topics, the history of ideas, and shared history, pondering universal concepts and patterns in the development of civilization that can still be observed today.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/ASIAN/HISTORY 267 – ASIAN RELIGIONS IN GLOBAL PERSPECTIVE**  
3-4 credits.

Comparative and thematic introduction to diverse Asian religious traditions, ideas and communities, and their relevance to human societies of the past and present. Not open to students with credit for E ASIAN 267 prior to Fall 2019

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**RELIG ST/ENVIR ST 270 – THE ENVIRONMENT: RELIGION & ETHICS**  
3-4 credits.

What are sources on which members of religious communities draw in order to understand and address environmental change? Explores how religious persons and communities confront global environmental questions and challenges today, with case studies drawn from culturally and religiously plural societies such as India and Indonesia. Introducing diverse varieties of Christianity, Islam, and Hindu and Buddhist systems, gives overview of some approaches in the environmental humanities related to philosophy, history, sociology and anthropology, and ethics.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**RELIG ST/ASIAN 274 – RELIGION IN SOUTH ASIA**  
3 credits.

Introductory survey of Hinduism, Buddhism, Islam, Sikhism, etc., and an examination of the cultural, historical, ritual, and philosophical foundations of South Asian religion. Not open to students with credit for LCA 274 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**RELIG ST/JEWISH 278 – FOOD IN RABBINIC JUDAISM**  
3-4 credits.

Rabbinic literature frames the fundamental attitudes for how Judaism relates to food. Examine the history of food in rabbinic Judaism. In addition, theories from the field of food studies will be applied to rabbinic texts.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**RELIG ST 300 – AMERICA AND RELIGIONS**

3 credits.

Explores the colorful, contested relationship of religion and American (U.S.) culture. Surveys a variety of themes from Native American-European encounters to the present. Significant court cases focus on the tension between a quest for American consensus and an abiding religious and cultural pluralism.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**RELIG ST 302 – CHRISTIANITY: INTERPRETATION AND PRACTICE**

3 credits.

A comparative, thematic exploration of major Christian theological ideas and their relationships to practices across varieties of Christianity and contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**RELIG ST/GEN&WS 305 – WOMEN, GENDER AND RELIGION**

3 credits.

Explores themes significant to the impact of religion on women and women on religion, historically and today, across a diverse range of contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST/ASIAN 306 – HINDUISM**

3 credits.

A historical survey of Hindu scriptures, rituals, philosophies, and ethics from the ancient to the contemporary world. Concepts such as karma, yoga, and reincarnation will be put in the broader contexts of Hindu theism, worship, and law. Not open to students who completed RELIG ST 355 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/ASIAN 307 – A SURVEY OF TIBETAN BUDDHISM**

3 credits.

By studying the distinctively Tibetan forms of Buddhism, we also examine more general issues, such as the relationship between theory and practice, ancient meditation and mind training, the politics of "world making", and the connection between identity and experience. Not open to students with credit for LCA 421 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST/ASIAN/HISTORY 308 – INTRODUCTION TO BUDDHISM**

3-4 credits.

The basic thought, practices and history of Buddhism, including selflessness and relativity, practices of meditation, merit-making and compassion from both local and translocal perspectives. Includes a discussion of Buddhism as a contemporary, North American religion. Not open to students with credit for E ASIAN or LCA 308 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/HISTORY/MEDIEVAL 309 – THE CRUSADES: CHRISTIANITY AND ISLAM**

3-4 credits.

An examination of the Crusades from both Christian and Islamic perspectives; the historical, social, and religious context and significance of the Crusades for both Christians and Muslims.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**RELIG ST 311 – SECTS AND CULTS**

3 credits.

An introduction to new religious movements in the U.S. frequently referred to as "sects," "cults," and "fringe religions."

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019

**RELIG ST/JEWISH 322 – THE SABBATH**

3 credits.

Takes up the question: What is the "Sabbath"? What does it mean "to rest"? Offers a broad, comparative introduction to the history of the Sabbath, from the Bible to the present day. Readings encompass a range of textual sources from the Jewish and Christian traditions. Topics include the major theological, ritual, and cultural practices that have developed around the Sabbath. Discuss contemporary political iterations of the Sabbath in modern, secular contexts.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/CLASSICS/JEWISH 323 – THE BIBLE AND FILM: LITERATURE AND MEDIA**

3 credits.

An introduction to the study of the Bible as literature and of biblical reception in the medium of film, from early Hollywood to the present day. Explores the way in which the Bible (including both Hebrew and Greek Testaments), one of the foundational literary corpora of American society, has been interpreted, reinterpreted, and misinterpreted through the medium of film over the past century. We will begin each segment of the course by reading portions of the biblical text that have experienced significant interpretation, in order to understand the literary text that has been received in film. How beholden are filmmakers to the interpretations of communities that view these texts as authoritative, and where are they free to depart from their sources? Is it possible to "translate" biblical narratives into film without losing something in the translation? These questions will focus our study on ways the literature has been interpreted in this new medium.

**Requisites:** Sophomore standing**Course Designation:** Gen Ed - Communication Part B  
Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**RELIG ST 327 – CHRISTIANITY AND THE ALMIGHTY DOLLAR**

3 credits.

Examines the relationships of Christian beliefs, ethics, spaces and practices to money, marketplace, wealth and poverty, consumption and business culture. Examines how Christians in a variety of situations and in a variety of ways shape and are shaped by capitalism and other economic forms. Focuses primarily on modern (19th-century) American contexts up to today. Global contexts and interactions with American religious cultures and well as earlier historical factors, however, figure prominently as well.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**RELIG ST/JEWISH/LITTRANS 328 – CLASSICAL RABBINIC LITERATURE IN TRANSLATION**

3-4 credits.

Introduction to the literature of the Classical Rabbinic or Talmudic period of Judaism (2nd to 7th centuries CE). Historical and intellectual background; the interrelation of liturgy, legal and non-legal literature.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**RELIG ST/HIST SCI/MED HIST 331 – SCIENCE, MEDICINE AND RELIGION**

3 credits.

Introduction to the study of religion, science, and medicine. Focus on how religion, science, and medicine have shaped practices of knowledge production and meaning making with respect to human life, by considering theories of human history and racial progress; how logics of contagion structure human relationships and communal boundaries; the variety of ways of understanding and caring for bodies; and the place of humans within broader ecologies.

**Requisites:** Junior standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**RELIG ST/CLASSICS/HEBR-BIB/JEWISH/LITTRANS 332 – PROPHETS OF THE BIBLE**

4 credits.

An introduction to the thought, literature, and history of the prophets of ancient Israel (in English).

**Requisites:** CLASSICS/JEWISH/LITTRANS/RELIG ST/CLASSICS/JEWISH/LITTRANS 227 or Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019

**RELIG ST 333 – EARLY CHRISTIAN LITERATURE: MATTHEW-REVELATION**

3 credits.

An exploration of Christianity's charter documents in the light of what modern scholarship has discovered about the New Testament's sociohistorical context, composition, theologies, and presentations of Jesus.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**RELIG ST/CLASSICS/JEWISH 335 – KING DAVID IN HISTORY AND TRADITION**

3 credits.

An exploration of the literary and historical aspects of the text of 1-2 Samuel + 1 Kings 1-2; the history and archaeology of Jerusalem during the tenth century B.C.E.; and the varieties of ways in which the figure of King David has been received in subsequent religious and secular literature, visual art, music, television, and cinema.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/JEWISH 340 – THE AMERICAN JEWISH LIFE OF DNA**

3 credits.

Explores the range of relationships between DNA and American Jewish life. It begins with the "prehistory" of the relationship between Jewishness and genetic science, from Biblical genealogies to early twentieth century racial science. It then turns to America in the second half of the twentieth century, when the discovery of the double helix and the atrocities of Auschwitz reinvigorated and reshaped American Jewish relationships to DNA.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/FOLKLORE/MEDIEVAL/SCAND ST 342 – NORDIC MYTHOLOGY**

3 credits.

Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST/ANTHRO 343 – ANTHROPOLOGY OF RELIGION**

3-4 credits.

Anthropological approaches. Illustrated by critical considerations of outstanding contributions. Selected religious systems; areal and topical comparative studies; religion as an ethnographic problem.

**Requisites:** ANTHRO 104 or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**RELIG ST/CLASSICS/JEWISH 346 – JEWISH LITERATURE OF THE GRECO-ROMAN PERIOD**

3 credits.

Jewish literature from 350 BCE to 150 CE. The Greek and Hebrew sources include stories, religious poetry, wisdom books and apocalyptic texts. Readings (in translation) from the Apocrypha, Pseudepigrapha, and the Dead Sea Scrolls in their historical, cultural and literary setting.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2016**RELIG ST/ASIAN 350 – INTRODUCTION TO TAOISM**

3-4 credits.

A study of the writings attributed to Lao-tzu and Chuang-tzu and their concepts, and the history and various aspects of religious Taoism. Consideration is given to Taoist influences on literature. Undergraduate majors register for 4 cr; non- majors and graduate majors register for 3 cr

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2017**RELIG ST/FOLKLORE 352 – SHAMANISM**

3 credits.

Survey of shamanism as a religious tradition and sociocultural force in Siberian, Asian, and Native American societies. Exploration of shamanic rituals, roles, cosmology. Cultural and political uses of shamanism in traditional and modern contexts.

**Requisites:** Sophomore standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**RELIG ST/ENVIR ST/HIST SCI 356 – ISLAM, SCIENCE & TECHNOLOGY, AND THE ENVIRONMENT**

3-4 credits.

Survey of Muslim religious understandings of science, technology, nature and environment. Gain a global perspective through case studies, covering sources such as the Qur'an, theology and law, and traditions of esoteric piety (mysticism), and historical and contemporary issues like medical ethics, virtual realities, and environmental change, challenge and crisis.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2015**RELIG ST/FOLKLORE 359 – MYTH**

3 credits.

The relationship between myth and tale, history, culture. Myth research; methodological approaches; world mythologies; myth and modern times.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**RELIG ST/ENGL/HISTORY 360 – THE ANGLO-SAXONS**

3 credits.

Life and literature during the Old English period (c450-c1100). Primary emphasis on the vernacular and Latin writings of the Anglo-Saxons themselves. Extensive historical and archaeological background; attention to the development and character of monasticism, to the production of manuscripts, etc. All reading in translation.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**RELIG ST 361 – EARLY CHRISTIAN LITERATURE: PAULINE CHRISTIANITY**

3 credits.

By conventional reckoning, Paul was a major contributor to the development of Christianity. Analyzes both Paul's and other contemporary writings to assess the extent to which he contributed to the development of the early church.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**RELIG ST/AFRICAN/ASIAN 370 – ISLAM: RELIGION AND CULTURE**

3-4 credits.

The emergence and development of Islam; schism; theology; asceticism; speculative and popular mysticism; literatures in diverse Islamic languages. Not open to students with credit for LCA 370 prior to Fall 2019.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**RELIG ST/ART HIST 373 – GREAT CITIES OF ISLAM**

3 credits.

A comparative study of the foundation and development of five great cities in the history of Islam: Cairo, Istanbul, Delhi, Mecca, and Isfahan. Architectural projects, ornamental idioms, and changes to the urban plan are studied from aesthetic and cultural perspectives. Integrates historical and religious studies to highlight the shifting nature of Islamic culture, from the tenth century CE to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**RELIG ST/COM ARTS 374 – THE RHETORIC OF RELIGION**

3 credits.

Rhetorical character of religious controversy and sectarian persuasion in Western religion.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2022**RELIG ST 400 – TOPICS IN RELIGIOUS STUDIES - HUMANITIES**

3-4 credits.

Topics may include religion in specific societies or regions; religion in the arts; contemporary themes in religion.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

### **RELIG ST 401 – TOPICS IN RELIGIOUS STUDIES - SOCIAL STUDIES**

3-4 credits.

Topics in religious studies in the social sciences.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

### **RELIG ST 403 – TOPICS IN RELIGIOUS STUDIES-US ETHNIC STUDIES**

3-5 credits.

Topics in historical or contemporary religious culture and society pertaining to persistently marginalized racial or ethnic groups in the United States.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2020

### **RELIG ST/AFROAMER 404 – AFRICAN AMERICAN RELIGIONS**

3 credits.

Explores the varieties of African American religious expressions from the colonial era to the present with emphasis on racism and resistance, marginalization and resilience, creative expression and the continued influence of Africa and the Caribbean.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

### **RELIG ST/ASIAN 405 – GODS AND GODDESSES OF SOUTH ASIA**

3 credits.

Introduces some of the most important deities of South Asia through visual representation, mythical narratives and rituals of worship. Topics include the development of iconographic forms and concepts, masculine and feminine aspects of the divine, the belief in human embodiments of divinities, the phenomenon of possession, modes of domestic and public worship and the symbolism of the temple structure.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RELIG ST 406 – THE AMISH**

3 credits.

An exploration of the faith and life of one of America's most familiar yet widely misunderstood religious groups, the Old Order Amish.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RELIG ST/HISTORY 409 – CHRISTIANITY IN THE ATLANTIC WORLD, 1500-1800**

3 credits.

Between the late Middle Ages and the era of democratic revolutions Western Christianity saw a series of sweeping changes that altered its global profile and helped form the modern world - examines some of these shifts and their impact. Questions explored include: Why did the Reformations of the 16th century occur and with what effects on people's lives and on early modern societies? What was the relationship between European colonization, the Atlantic slave trade, new theories of race, and the spread of Christianity to the "New World"? How was the Christian religion resisted, received, and reshaped by Native Americans and people of African descent? What sparked movements of reform and renewal - including new Catholic religious orders and the Protestant Evangelical Awakening - and with what consequences for modern Christianity? How did the nature of Christian belief and identity change under the impact of religious conflict, political revolution, and new intellectual movements?

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **RELIG ST 410 – CHILDREN AND RELIGION IN AMERICA**

3 credits.

Based upon the assumption children are important participants in religious communities; that they co-create their religious traditions. Through studies of children's lives in various religious communities in America (mostly), explore how including children's perspectives shifts general claims about religious groups and their practices.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021



### **RELIG ST/HISTORY 411 – THE ENLIGHTENMENT AND ITS CRITICS** 3 credits.

European intellectual history in the 17th and 18th centuries, from the Wars of Religion to the French Revolution. Examines the rise of Enlightenment thought in relation to political and religious conflict, revolutions in science and philosophy, and the emergence of the public sphere. Special attention is paid to the Enlightenment's relationship to religion and to contemporary critiques made of Enlightenment thinking, including those of the early Romantic movement.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **RELIG ST/AFRICAN 414 – ISLAM IN AFRICA AND THE DIASPORA** 3 credits.

Explore African Muslim communities and Black Muslim communities in the US as an under-examined archive of Islamic authenticity and authority. Involves close readings of ethnographies, fiction, films, and other forms of cultural expression and examination of the practice of Islam and representation of Muslims in Africa and Muslims of African ancestry in the US. Through both primary and secondary sources, explore themes of not just authenticity and authority but also related issues of representation, positionality, difference, otherness, essentialism, and normativity. Ultimately, form a deeper understanding of the diversity and complexity of Islam and Muslims of African ancestry.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **RELIG ST 420 – RELIGIOUS STUDIES COLLOQUIUM** 1 credit.

Explores why and how religious studies matters as a helpful interpretative field across a variety of topics of interdisciplinary interest and societal concern.

**Requisites:** Declared in Religious Studies, Certificate in Religious Studies, or Religious Studies Doctoral Minor

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

### **RELIG ST/ASIAN 430 – INDIAN TRADITIONS IN THE MODERN AGE** 3 credits.

Explores how ancient Indian traditions have been reframed for the modern age. Topics include the Ramayana in popular media, negotiations over sacred spaces, and popular Tantra. We will also examine recent controversies, such as the one surrounding the ancient Jain practice of fasting until death (sallekhana) in the modern age.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **RELIG ST/POLI SCI 433 – RELIGION AND POLITICS** 3-4 credits.

Explores the relationships and interactions between religion and politics from a comparative perspective. Discuss the appropriate relationship between religion and state. Investigate the implications of the various ways in which the religion-state relationship have been involved in political conflict. Building on this, turn to several of the current issues in religion and politics asking: Why is religion apparently more important than ever despite an increasingly secular world? What is religious nationalism? What is fundamentalism? How can we explain the similarities and differences between religious fundamentalist movements across the globe? How should democratic states cope with the emergence of fundamentalist movements? In order to begin answering these questions, integrate the theoretical frameworks we develop with explorations of the historical and local context of relevant case-studies from around the world.

**Requisites:** Sophomore standing and (POLI SCI 140, 120, RELIG ST 101, 102, 103, or INTL ST 101) or (POLI SCI 103 or 106 prior to fall 2017)

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

### **RELIG ST/ENGL 434 – MILTON** 3 credits.

Study of John Milton's poems and selected prose.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**RELIG ST/JEWISH/PHILOS 435 – JEWISH PHILOSOPHY FROM ANTIQUITY TO THE SEVENTEENTH CENTURY**

3 credits.

A survey of major philosophers and philosophical currents within Judaism from antiquity through the seventeenth century.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**RELIG ST/ASIAN/HISTORY 438 – BUDDHISM AND SOCIETY IN SOUTHEAST ASIAN HISTORY**

3-4 credits.

Theravada Buddhism in Southeast Asia; ideas and basic tenets; history and its impact on social and political institutions; the monastic order and relations with the states; roles in the early history up to the present; focus on Thailand, Burma and Cambodia. Not open to students with credit for LCA 438 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2014

**RELIG ST/ITALIAN/MEDIEVAL 440 – POVERTY, ECOLOGY AND THE ARTS: ST. FRANCIS OF ASSISI**

3 credits.

Focuses on literature about Francis of Assisi, from medieval accounts to contemporary literature, and related artistic portrayals of St. Francis as a religious symbol and model for economic, political and environmental justice.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/ASIAN 444 – INTRODUCTION TO SUFISM (ISLAMIC MYSTICISM)**

3 credits.

The rise and development of mysticism in Islam; basic Sufi doctrines, values and practices; life and works of important speculative and popular Sufi saints; Sufi brotherhoods in the Middle East, South Asia and North Africa. Not open to students with credit for LCA 444 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**RELIG ST/ASIAN 460 – THE HISTORY OF YOGA**

3 credits.

Explores the history of Yoga techniques from the ancient to the modern period. Not open to students with credit for RELIG ST 623 prior to Spring 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/AFRICAN/JEWISH/MEDIEVAL 462 – MUSLIMS AND JEWS**

3 credits.

Explores the historical relationship between Muslims and Jews in a variety of contexts from the seventh century to the present. Surveys literary and cultural exchanges against the background of shifting political and social conditions across the Middle East, Europe, and the United States. Considers also the parallel legacies of anti-Semitism, Orientalism, and Islamophobia. Major themes include comparative religion, secularization, migration, and colonialism, as well as the politics of history and cultural memory. Introduces readings in English translation of medieval and modern texts originally written across languages, and especially in Hebrew and Arabic.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**RELIG ST/ASIAN 466 – BUDDHIST THOUGHT**

3 credits.

Survey of the fundamental trends in Buddhist thought through the works of major philosophers. Themes include the concept of "selflessness" and concomitant theories of essencelessness, perception, language and rationality. Not open to students with credit for E ASIAN or LCA 466 prior to Fall 2019.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**RELIG ST/ASIAN 473 – MEDITATION IN INDIAN BUDDHISM AND HINDUISM**

3 credits.

Examines contemplative practices in the two major Indian religions, Buddhism and Hinduism. Covers practices described in ancient texts but also provides an overview of selected modern practices.

**Requisites:** Sophomore standing (not open to students with credit for LCA 624 prior to Fall 2019)

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RELIG ST 475 – RELIGION, GLOBAL AND PUBLIC HEALTH**

3 credits.

Explores health issues and practices in religious communities and their interaction with public health concerns and programs in U.S. and international contexts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/ART HIST 478 – ART AND RELIGIOUS PRACTICE IN MEDIEVAL JAPAN**

3 credits.

A study of spaces, objects, and images within the context of religious belief and practice in Japan between 1300 and 1600, when great Zen monasteries grew up alongside older Buddhist/Shinto religious "megaplexes," and new salvationist sects spread throughout Japan.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**RELIG ST 500 – ADVANCED TOPICS IN RELIGIOUS STUDIES**

2-4 credits.

Topics may include religion in specific contexts, religion and other disciplines or specific themes in Religious Studies.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**RELIG ST/PHILOS 501 – PHILOSOPHY OF RELIGION**

3-4 credits.

Analysis of religious experience and activity, and examination of principal religious ideas in light of modern psychology, philosophy, science, and anthropology.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**RELIG ST/PHILOS 502 – SPECIAL TOPICS IN PHILOSOPHY OF RELIGION**

3 credits.

One or more topics selected from among the following: religious discourse, God, evil, survival, great philosophers of religion, etc. Variable content.

**Requisites:** Junior standing or 3 Credits in PHILOS

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2013

**RELIG ST/ASIAN 505 – THE PERFECTIBLE BODY IN RELIGIONS, MEDICINES, AND POLITICS**

3 credits.

Looking at the cultural institutions of politics, medicine, and religion in multiple cultures and historical times, students will explore ideas about what constitutes a perfect body, how and why different parts of the body are privileged over others, and how and why the notion of bodily perfectibility differs for men and women, children and adults, and humans and gods. Readings encourage such questions as: Is the perfect body attainable and, if so, how? And, who benefits from bodily perfection (or the rhetoric of the bodily perfection)? We will ask these questions with comparative intent: we want both to learn about cultures other than our own and, in the process of understanding the other, we will ask how this new knowledge might empower us to be more observant and critical of the role(s) and treatment of the body in our own society historically and today.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**RELIG ST/CURRIC/ED POL 516 – RELIGION AND PUBLIC EDUCATION**

3 credits.

Examines theories and practices related to the role of religion in public schooling and its accompanying tensions: political and philosophical, practical and personal.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**RELIG ST/CLASSICS/HISTORY 517 – RELIGIONS OF THE ANCIENT MEDITERRANEAN**

3 credits.

Ancient religions in their political, social and cultural contexts; topics include ritual, literary and artistic representations, religious persecutions, and/or modern approaches to the study of ancient religions. Chronological and geographical focus will vary between Greece, Rome, Judaea and Egypt.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**RELIG ST 600 – RELIGION IN CRITICAL PERSPECTIVE**

3 credits.

Theory and analysis of religion as a human phenomenon.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RELIG ST 601 – SENIOR CAPSTONE RESEARCH AND COLLOQUIUM**

4 credits.

Integrated capstone course combining discussion of research methods, conduct of senior thesis research, and presentation and discussion of research results.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST/ASIAN 650 – PROSEMINAR IN BUDDHIST THOUGHT**

2-3 credits.

Advanced topics in theories focused on the mechanisms of contemplative practices such as mindfulness, focused attention and compassion practices, with special emphasis on the interaction of traditional theories from contemplative traditions such as Buddhism and more recent theoretical accounts in psychology and cognitive science.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RELIG ST 681 – SENIOR HONORS THESIS**

3 credits.

Independent research undertaken by students in the honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**RELIG ST 682 – SENIOR HONORS THESIS**

3 credits.

Independent research undertaken by students in the honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**RELIG ST 699 – DIRECTED STUDY**

1-4 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**RELIG ST 799 – INDEPENDENT RESEARCH**

1-6 credits.

Independent research for graduate students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2010

**RELIG ST/HISTORY 963 – AMERICAN RELIGIOUS HISTORY TO 1860**

3 credits.

The creation of a national religious culture from the earliest settlements to the mid-nineteenth century.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**RELIG ST 999 – INDEPENDENT WORK**

1-6 credits.

Individual tutorial on topics in religious studies.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

## RISK MANAGEMENT AND INSURANCE (R M I)

**R M I 300 – PRINCIPLES OF RISK MANAGEMENT**

3 credits.

Nature of risk, principal techniques of risk management, including insurance markets, and the bases for decision-making in managing risk effectively.

**Requisites:** (ECON 101 or 111) or declared in undergraduate Business Exchange program. Not open to graduate/professional students

**Course Designation:** Breadth - Social Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 365 – CONTEMPORARY TOPICS**

1-3 credits.

Exploration of subject areas possibly to be introduced into the business curriculum.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**R M I 399 – READING AND RESEARCH-RISK MANAGEMENT**

1-6 credits.

Individual work suited to the needs of undergraduate students may be arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2021

**R M I/ECON 530 – INSURING LIFE'S RISKS: HEALTH, AGING, AND POLICY**

3 credits.

Covers risks related to health and aging, rationales for social insurance programs to protect against these risks, and costs and benefits of these programs. Broad topics include health insurance, disability insurance, and Social Security and pension policy.

**Requisites:** (ECON 301 or 311) and ECON 310; or graduate/professional standing

**Course Designation:** Breadth - Social Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**R M I 610 – PROPERTY RISK MANAGEMENT**

3 credits.

Comprehensive analysis of loss control and transfer techniques (including insurance), risk management concepts, loss adjustment and underwriting problems, and profitability/regulatory issues concerning the insurance industry. Current topics: large-scale catastrophes (hurricanes and earthquakes), solvency, insurance coverages for property exposures, and loss control.

**Requisites:** R M I 300 or A A E/ECON/REAL EST/URB R PL/A A E/ECON/REAL EST 306

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**R M I 615 – LIABILITY RISK MANAGEMENT**

3 credits.

Comprehensive analysis of economic services, benefits, rates and rating theory, loss adjustment problems, legal theory factors, risk management concepts, loss prevention and transfer techniques and government regulation of public liability insurance. Topics include: medical malpractice, no-fault auto insurance, professional liability, workers' compensation, products liability and pollution liability.

**Requisites:** R M I 300

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**R M I 620 – EMPLOYEE BENEFITS MANAGEMENT**

3 credits.

Nongovernmental schemes for treating the risks of superannuation of members of a group; property, liability, legal expense, life and health coverages available to groups; organizational characteristics, benefit structure and pricing of risk transfer schemes for groups; characteristics and funding of various types of pension plans; effects of ERISA.

**Requisites:** R M I 300 or graduate standing or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I 635 – CAPTIVE INSURANCE**

1-2 credits.

Examines how captive insurance works, the different structures of captives, and advantages and disadvantages of their use in various settings. In addition, the captive feasibility process, as well as techniques for measuring financial performance, will be covered.

**Requisites:** R M I 300, 700, or declared in the Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 636 – INSURANCE ACCOUNTING**

1 credit.

Focuses on how insurance is affected by accounting rules including discussion of Statutory Accounting Principles and their effect on strategic decisions.

**Requisites:** R M I 300 or 700

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I 637 – REINSURANCE**

1 credit.

Focuses on reinsurance, a key component to the successful implementation of the insurance mechanism. Provides exposure to the types and uses of reinsurance, its specific regulatory requirements, how it affects and is affected by primary insurance, and general market mechanisms.

**Requisites:** R M I 300 or 700

**Repeatable for Credit:** No

**R M I 640 – MANAGEMENT OF INSURANCE ENTERPRISE**

3 credits.

Functional analysis of the operations of insurance organizations; legal organization, marketing systems, management and control, underwriting, rating, financial analysis, rate making and regulation.

**Requisites:** (R M I 300 or 700) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 645 – COMMERCIAL INSURANCE**

3 credits.

Consideration of the structure, use, benefits, and limitations of corporate insurance products. Fundamental to the material is the economic underpinning of the insurance contract structure. The major commercial property and liability insurance products will be analyzed in detail with the purpose of illustrating these economic principles and applying them to specific organizational situations.

**Requisites:** (R M I 300 or 700) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I 650 – SUSTAINABILITY, ENVIRONMENTAL AND SOCIAL RISK MANAGEMENT**

2-3 credits.

The assessment, control, financing and management of risks deriving from pressures on and damages to the environment, workers and local/foreign communities. Risks include liability and directors and officers law suits, boycotts, regulations and competitors' actions.

**Requisites:** Junior standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I 655 – RISK FINANCING TECHNIQUES**

3 credits.

Study of advanced risk management tools and markets for financing loss costs. Topics include: insurance, self-insurance, retrospective premium plans, risk retention and purchasing groups, reinsurance, insurance subsidiaries (captives), and other policyholder-owned facilities.

**Requisites:** (R M I 300 or graduate standing), (GEN BUS 306, 704, MATH/STAT/MATH 309, or STAT 311), and (ECON/FINANCE/ECON 300 or FINANCE 700) or declared in the Business Exchange program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I 660 – RISK ANALYTICS AND BEHAVIORAL SCIENCE**

2-3 credits.

An overview about the challenges people face in situations with risk and uncertainty with a goal of enhancing the ability to navigate uncertainty. Use that knowledge to identify decision-making biases and to build a framework for thinking clearly about decisions in uncertain environments. Introduces techniques for improving the understanding of risk and uncertainty and the potential consequences of our choices. Practice working through making inferences and decisions in the face of ambiguity.

**Requisites:** (R M I 300 or graduate/professional standing) and (GEN BUS 306, 704, 705, MATH/STAT/MATH 309, 431 or STAT 311)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 670 – CYBER RISK & REGULATIONS**

2-3 credits.

Defines cyber risk and studies prominent case examples to become familiar with the many challenges it poses. Includes an in-depth look at the current state of data privacy law both in the US and globally. Establishes a framework and some basic methods to quantify cyber risk. Explores current cyber risk management options in the market including the implementation of internal risk controls as well as options in the burgeoning market for cyber insurance.

**Requisites:** None

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**R M I 700 – PRINCIPLES OF RISK MANAGEMENT**

3 credits.

Nature of risk, principal techniques of risk management, including insurance markets, and the bases for decision-making in managing risk effectively.

**Requisites:** Graduate/professional standing. Not open to students with credit for R M I 300

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**R M I/GEN BUS 701 – MANAGING LEGAL RISKS**

3 credits.

Legal implications for business managers of selected areas of the law including negligence, contract, intellectual property, officer/director liability, financing the business enterprise, and employment and trade regulation; introduction to the legal process, including alternative dispute resolution systems.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**R M I 705 – RISK MANAGEMENT AND TECHNOLOGIES IN A DIGITAL AGE**

3 credits.

Develop insight into the principles of risk management, including institutions engaged in identifying, assessing, preventing, mitigating, and transferring risk. Specific focus is given to how the digitization of data, technology, and analytics are creating a new risk landscape, and how conventional risk management approaches can adapt to meet these emerging business needs.

**Requisites:** Graduate/professional standing. Not open to students with credit for R M I 300 or 700.

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 710 – RISK MANAGEMENT**

2 credits.

The purpose of risk management is to minimize the adverse consequences of variability. Topics include the general philosophy of risk management, environmental factors affecting risk, options to manage risk, and decision processes to select among those options.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 765 – CONTEMPORARY TOPICS**

1-4 credits.

Exploration of advanced subject areas possibly to be introduced into the business curriculum.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**R M I 799 – READING AND RESEARCH-RISK MANAGEMENT**

1-6 credits.

Individual work suited to the needs of graduate students may be arranged.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**R M I 820 – ADVANCED TOPICS IN RISK MANAGEMENT**

3 credits.

Examination of data collection and analysis methods for risk management decisions. Analysis of qualitative and quantitative data to support transfer, retention, and loss control decisions, including loss trending, and evaluation of regulatory controls.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**R M I 875 – SEMINAR-RISK MANAGEMENT AND INSURANCE**

3 credits.

Applied learning in risk management and insurance.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**R M I 920 – SEMINAR IN ACTUARIAL SCIENCE, RISK MANAGEMENT & INSURANCE I**

3 credits.

Doctoral seminar in actuarial science, risk management and insurance with emphasis on developing an appreciation of existing literature and appropriate skills to conduct own scholarly work in the field.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**R M I 930 – SEMINAR IN ACTUARIAL SCIENCE, RISK MANAGEMENT & INSURANCE II**

3 credits.

Doctoral seminar in actuarial science, risk management and insurance, with emphasis on developing an appreciation of existing literature and appropriate skills to conduct own scholarly work in the field.

**Requisites:** Graduate/professional standing or declared in graduate Business Exchange program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**R M I 990 – RISK & INSURANCE INDEPENDENT RESEARCH PHD THESIS**

1-12 credits.

Individual work to complete dissertation requirement of Ph.D. program.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**R M I 999 – READING AND RESEARCH-RISK MANAGEMENT AND INSURANCE PHD**

1-6 credits.

Individual work suited to the needs of Ph.D. students may be arranged.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## SCANDINAVIAN STUDIES (SCAND ST)

**SCAND ST 101 – FIRST SEMESTER NORWEGIAN**

4 credits.

For beginning learners of Norwegian; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SCAND ST 102 – SECOND SEMESTER NORWEGIAN**

4 credits.

For beginning learners of Norwegian; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** SCAND ST 101

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST 111 – FIRST SEMESTER SWEDISH**

4 credits.

For beginning learners of Swedish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SCAND ST 112 – SECOND SEMESTER SWEDISH**

4 credits.

For beginning learners of Swedish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** SCAND ST 111

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST 121 – FIRST SEMESTER DANISH**

4 credits.

For beginning learners of Danish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SCAND ST 122 – SECOND SEMESTER DANISH**

4 credits.

For beginning learners of Danish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** SCAND ST 121**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 131 – FIRST SEMESTER FINNISH**

4 credits.

For beginning learners of Finnish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 132 – SECOND SEMESTER FINNISH**

4 credits.

For beginning learners of Finnish; emphasis on proficiency through speaking, listening, reading, and writing, and on communication in cultural context.

**Requisites:** SCAND ST 131**Course Designation:** Frgn Lang - 2nd semester language course

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 201 – SECOND YEAR NORWEGIAN**

4 credits.

Reading of selections from Norwegian writers, grammar review and conversation.

**Requisites:** SCAND ST 102**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 202 – SECOND YEAR NORWEGIAN**

4 credits.

Rapid reading of suitable Norwegian texts by modern writers.

**Requisites:** SCAND ST 201**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 211 – SECOND YEAR SWEDISH**

4 credits.

Reading of selections from Swedish writers, grammar review and conversation.

**Requisites:** SCAND ST 112**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 212 – SECOND YEAR SWEDISH**

4 credits.

Reading of selections from Swedish writers, grammar review and conversation.

**Requisites:** SCAND ST 211**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 221 – SECOND YEAR DANISH**

4 credits.

Reading of selections from Danish writers, grammar review and conversation.

**Requisites:** SCAND ST 122**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 222 – SECOND YEAR DANISH**

4 credits.

Reading of selections from Danish writers, grammar review and conversation.

**Requisites:** SCAND ST 221**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**SCAND ST 250 – INTRODUCTION TO SCANDINAVIA**

3 credits.

Provides an introductory survey of Scandinavia and Northern Europe. Approaches the source material by focusing on concepts such as environment and sustainability, nation, migration, diversity, family, childhood, happiness, and melancholy. Learn about modern and contemporary Northern European cultures through literature, film, television, music, and other media from Norway, Denmark, Sweden, Iceland, Finland, Sápmi, or the Baltic countries.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 251 – READINGS IN NORWEGIAN LITERATURE**

3-4 credits.

Prose, poetry, and drama read in Norwegian. Taught extensively in Norwegian.

**Requisites:** SCAND ST 202**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frqn Lang - 5th + semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SCAND ST 261 – READINGS IN SWEDISH LITERATURE**

3-4 credits.

Prose, poetry, and drama read in Swedish. Taught extensively in Swedish.

**Requisites:** SCAND ST 212**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SCAND ST 271 – READINGS IN DANISH LITERATURE**

3-4 credits.

Prose, poetry, and drama read in Danish. Taught extensively in Danish.

**Requisites:** SCAND ST 222**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frqn Lang - 5th + semester language course

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SCAND ST 276 – CULTURE & COMMUNITY IN SCANDINAVIA**

3 credits.

An extensive, wide-ranging introduction to the cultures of and community in the Scandinavian and Nordic Countries. Through a diverse series of guest lectures and discussions, explore the culture, arts, geography, history, religion, languages, music, literature, politics etc. of the Scandinavian countries.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**SCAND ST 296 – THE SCANDINAVIAN HERITAGE IN AMERICA**

3 credits.

Nineteenth century Scandinavian immigration.

**Requisites:** Satisfied Communications A requirement**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2016**SCAND ST 299 – DIRECTED STUDY**

1-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SCAND ST/FOLKLORE/MEDIEVAL/RELIG ST 342 – NORDIC MYTHOLOGY**

3 credits.

Mythology, literature, ritual, traditions, medieval folklore, and religion from Nordic areas and Scandinavia.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SCAND ST/FOLKLORE/LITTRANS/MEDIEVAL 345 – THE NORDIC STORYTELLER**

3 credits.

Exploring the oral nature and performance traditions of folklore, ethnography, tales and ballads, literature and culture from Nordic areas and Scandinavia.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST 348 – THE SECOND WORLD WAR IN NORDIC CULTURE**

3 credits.

How have the wartime issues of occupation, resistance, collaboration, neutrality, and the Holocaust been addressed in Nordic culture? During the Second World War, Norway and Denmark were invaded and occupied by Nazi Germany, while Sweden remained neutral and Finland fought against the Soviet Union. Resistance movements developed in the occupied countries, but some Norwegians and Danes collaborated with the occupying power and were tried for treason after the war. Become familiar with the basic history of the period by reading texts of various sorts (essays, novels, diaries, poetry, memoir) that were written during the war years and since. Through analyzing films and works of fiction, in addition to historical writing, learn how the Second World War and the Holocaust have been represented and remembered in the Nordic countries.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST 355 – AUTOBIOGRAPHY**

3 credits.

Investigate the genre of autobiography in historical, cultural, and literary contexts, with a highlight of Nordic authors. Analyze autobiographical writing in the context of race, ethnicity, gender, and sexuality, while problematizing concepts such as "fiction," "truth" and "self."

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**SCAND ST 373 – MASTERPIECES OF SCANDINAVIAN LITERATURE: FROM THE MIDDLE AGES TO 1900**

3-4 credits.

During the late Middle Ages, Scandinavian literature reached its first high point: The Old Norse sagas and poems. Study Scandinavian literature from the sagas to the prose and drama of the golden age of the late 19th century.

**Requisites:** SCAND ST 202, 212, or 222

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SCAND ST 374 – MASTERPIECES OF SCANDINAVIAN LITERATURE: THE TWENTIETH CENTURY**

3-4 credits.

Through a selection of short texts, novels, and plays, we'll be learning from some of the best: Nobel Laureates (Knut Hamsun, Pär Lagerkvist), medical doctors (P.C. Jersild), and other provocateurs (August Strindberg, Isak Dinesen, Ingmar Bergman, Peter Hoeg, and the rest).

**Requisites:** SCAND ST 202, 212, or 222

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST 401 – CONTEMPORARY SCANDINAVIAN LANGUAGES**

3 credits.

Intensive work in spoken and written Danish, Norwegian, and Swedish, based on contemporary readings.

**Requisites:** SCAND ST 251, 261, 271, or graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SCAND ST 404 – LANGUAGES OF NORTHERN EUROPE**

2-4 credits.

Introduction to languages of Northern Europe not covered by other department courses (e.g., Sami, Estonian). Practice in language, accompanied by introduction to grammar, culture, and literature. Other language-related topics offered occasionally; check timetable for details.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SCAND ST/MEDIEVAL 407 – INTRODUCTORY OLD NORSE**

3 credits.

Designed with a linguistic purpose: to obtain a reading knowledge of Old Norse-Icelandic through the study of Old Icelandic grammar and selections of Old Norse-Icelandic texts.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SCAND ST/MEDIEVAL 408 – INTERMEDIATE OLD NORSE**

3 credits.

Designed with a linguistic purpose: to obtain a reading knowledge of Old Norse-Icelandic through the study of Old Icelandic grammar and selections of Old Norse-Icelandic texts.

**Requisites:** MEDIEVAL/SCAND ST/MEDIEVAL 407

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST/MEDIEVAL 409 – SURVEY OF OLD NORSE-ICELANDIC LITERATURE**

3 credits.

Eddic and skaldic poetry; homilies and saints' lives, kings' sagas, sagas of the Icelanders; mythical-heroic sagas and romances; rimur.

**Requisites:** SCAND ST/MEDIEVAL/SCAND ST 407 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST 410 – INTRODUCTION TO SCANDINAVIAN LINGUISTICS**

3 credits.

Scandinavia as a linguistic area. The main historical developments and structural features of the Scandinavian languages.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST 411 – AREAS IN SCANDINAVIAN LITERATURE**

1 credit.

Concentrated study of topics within Scandinavian literature.

**Requisites:** SCAND ST 251, 261, 271, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SCAND ST 415 – HISTORY OF THE SCANDINAVIAN LANGUAGES II: STANDARD LANGUAGES**

3 credits.

Study of Scandinavian languages from the early Scandinavian period to the present day.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST 419 – SCANDINAVIAN CHILDREN'S LITERATURE**

4 credits.

Forms and themes of Scandinavian children's literature from the nineteenth century to the present. Exploration of the dominant concerns of authors, adult and non-adult audiences. Film adaptations and Scandinavian-American materials included.

**Requisites:** Junior standing and SCAND ST 202, 212, or 222, or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**SCAND ST 421 – ADVANCED TOPICS IN NORDIC STUDIES**

1-3 credits.

Study of topics in Nordic and Nordic-American history, culture, and/or folklore.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019



**SCAND ST 422 – THE DRAMA OF HENRIK IBSEN**

4 credits.

Intensive study of dramatic production and the part played by Ibsen as the founder of modern drama.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST 423 – THE DRAMA OF AUGUST STRINDBERG**

4 credits.

Ideas and dramatic practice in the plays of August Strindberg.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**SCAND ST 424 – NINETEENTH-CENTURY SCANDINAVIAN FICTION**

3-4 credits.

Readings in such authors as Hans Christian Andersen, Steen Steensen Blicher, C.J.L. Almquist, Alexis Kivi, Bjornstjerne Bjornson, Jonas Lie, Alexander Kielland, Jens Peter Jacobsen, Henrik Pontoppidan, August Strindberg, Selma Lagerlof, and Johs V. Jensen.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST 426 – KIERKEGAARD AND SCANDINAVIAN LITERATURE**

3 credits.

An introduction to Danish philosopher Søren Kierkegaard and existentialism in Scandinavian literature. An overview into Kierkegaard's work in translation and his influence on a number of Scandinavian writers from the 19th century to the 21st.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST 427 – CONTEMPORARY SCANDINAVIAN LITERATURE**

4 credits.

Twentieth-century literary traditions and experiments, with attention to major movements, genres, and authors.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**SCAND ST/LITTRANS 428 – MEMORY AND LITERATURE FROM PROUST TO KNAUSGARD**

3 credits.

Investigates the relations between theories of memory, both individual and collective, and modern literary representations of remembering. Survey seminal conceptions of memory in the interdisciplinary field of memory studies, investigating topics such as nostalgia, trauma, personal and cultural identity, war and Holocaust, sites of memory, and autobiographical narrative. Through the avenues opened up by these theoretical frameworks, consider the narrative forms as well as the ethical and political dimensions of remembering in major novels by Marcel Proust, W. G. Sebald, and Karl Ove Knausgard.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SCAND ST/MEDIEVAL 430 – THE VIKINGS**

4 credits.

Within a historical framework, a thorough introduction to the culture, literature, and religion of the Vikings.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SCAND ST/HISTORY 431 – HISTORY OF SCANDINAVIA TO 1815**

3 credits.

Political, social, economic, and cultural developments of Scandinavia through the "Viking Age" to the break-up of Sweden-Finland and Denmark-Norway; emphasis on the interplay between social and political forces and institutions and the area's relationship with the rest of Europe.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST/HISTORY 432 – HISTORY OF SCANDINAVIA SINCE 1815**  
3 credits.

Political, social, economic, and cultural development: political realignments and rise of nationalism, industrialization and rise of liberalism and socialism, democratization, independence struggles and social conflict, evolution of welfare states, World War II and its aftermath.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Either Humanities or Social Science Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST 434 – THE ART OF ISAK DINESEN/KAREN BLIXEN**  
4 credits.

Blixen's tales and biographical fiction; themes of gender, power, dreams, and love.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST/LITTRANS 435 – THE SAGAS OF ICELANDERS IN ENGLISH TRANSLATION**  
3 credits.

The prose narratives of medieval Iceland. Gain an understanding of saga literature as a genre and of the cultural history of Iceland in the Viking Era and the Middle Ages, based on the interplay between pagan codes of honor and Christian ethics. In addition, gain an understanding of the methodological problems involved in studying sagas as historical documents.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST 436 – TOPICS IN SCANDINAVIAN LITERATURE**  
3–4 credits.

An examination of selected topics in Scandinavian literature.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SCAND ST/GEN&WS/LITTRANS 438 – SEXUAL POLITICS IN SCANDINAVIA**  
3 credits.

Read and discuss works by Scandinavian writers of the nineteenth and twentieth century reflecting sexual politics and the roles of women in literature. Course taught in English.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST 439 – NORDIC FILMMAKERS**  
3 credits.

Analyze English translations of key works by Nordic filmmakers as well as theories, histories, and the changing meaning of film authorship in the Nordic region.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**SCAND ST/FOLKLORE 440 – SCANDINAVIAN AMERICAN FOLKLORE**  
3 credits.

Examines the verbal, musical, customary, and material folklore of Scandinavian Americans, with emphasis on the upper Midwest.

**Requisites:** Junior standing

**Course Designation:** Breadth – Humanities

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SCAND ST/FOLKLORE 443 – SAMI CULTURE, YESTERDAY AND TODAY**  
4 credits.

Interdisciplinary study of Sami (Lapp) people of Scandinavia past and present. Indigenous modes of expression and worldview, contemporary cultural and political activism. Extensive discussion of connections to Native American and Inuit experiences; rise of U.S. and other indigenous peoples' movements.

**Requisites:** Junior standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SCAND ST/MEDIEVAL 444 – KALEVALA AND FINNISH FOLK-LORE**

4 credits.

Kalevala – the national epic of Finland – and the oral literature of Finland.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SCAND ST/FOLKLORE/MEDIEVAL 446 – CELTIC-SCANDINAVIAN CULTURAL INTERRELATIONS**

3 credits.

Examination of shared traditions and historical connections between the North and Northwest of Europe. Readings of medieval and pre-modern Scandinavian, Scottish, Welsh and Irish sagas, histories, tales. Discussion of the role of folklore in modern Celtic and Scandinavian societies.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 450 – SCANDINAVIAN DECADENCE IN ITS EUROPEAN CONTEXT**

3-4 credits.

Examines the European context of literary decadence (Baudelaire, Huysmans, Wilde) and how it inspired some of Scandinavia's most important writers (Strindberg, Hamsun, Jacobsen).

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**SCAND ST 475 – THE WRITINGS OF HANS CHRISTIAN ANDERSEN FOR SCANDINAVIAN MAJORS**

4 credits.

In-depth discussion of selected texts, historical and literary background material, application and discussion of pertinent literary criticism.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 476 – SCANDINAVIAN LIFE AND CIVILIZATION II**

4 credits.

Scandinavian culture in all its aspects ranging from past history up to contemporary trends in politics and ideologies.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**SCAND ST 496 – THE SCANDINAVIAN HERITAGE IN AMERICA**

3 credits.

Nineteenth century Scandinavian immigration.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Summer 2016**SCAND ST 510 – TOPICS IN SCANDINAVIAN LINGUISTICS**

3 credits.

Hands-on introduction to a topic in Scandinavian language study.

**Requisites:** Graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**SCAND ST 511 – PALEOGRAPHY AND PHILOLOGY – OLD NORSE**

3 credits.

A history of writing in Iceland 1150-1550 on the basis of manuscripts as principal sources of evidence for Old Norse-Icelandic.

**Requisites:** SCAND ST/MEDIEVAL/SCAND ST 407 or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 520 – SPECIAL TOPICS**

3 credits.

Special topics in Scandinavian culture, literature, and linguistics.

**Requisites:** Junior standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021

**SCAND ST/HISTORY 577 – CONTEMPORARY SCANDINAVIA: POLITICS AND HISTORY**

3-4 credits.

Social, economic, and ideological changes, institutions, and movements and their relationships with the political processes and structures in the Nordic states.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**SCAND ST 630 – FUNDAMENTALS OF BIBLIOGRAPHY AND RESEARCH**

3 credits.

Research resources and methodology; scholarly research and literary criticism.

**Requisites:** Junior standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**SCAND ST 634 – SURVEY OF SCANDINAVIAN LITERATURE: 1500-1800**

3 credits.

Survey representative literary texts from Scandinavia spanning through Reformation, Renaissance, Baroque, Rococo and Pre-Romanticism, including historical context.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020**SCAND ST 635 – SURVEY OF SCANDINAVIAN LITERATURE: 1800-1890**

3 credits.

Survey representative literary texts from Scandinavia spanning eras including Romanticism, Realism, and Naturalism; includes historical context.

**Requisites:** SCAND ST 202, 212, 222 or graduate/professional standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SCAND ST 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SCAND ST 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SCAND ST 698 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 1991**SCAND ST 699 – DIRECTED STUDY**

1-6 credits.

Advanced directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SCAND ST 710 – TOPICS IN DEPTH**

1-2 credits.

Penetrating study of an important Scandinavian literary or linguistic topic.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020

**SCAND ST 799 – INDEPENDENT STUDY**

1-6 credits.

Faculty-guided in depth study of a topic.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SCAND ST 901 – SEMINAR IN SPECIAL TOPICS**

2-3 credits.

In-depth study of topic of faculty's choice.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SCAND ST 990 – RESEARCH AND THESIS**

1-6 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SCAND ST 999 – INDEPENDENT READING**

1-6 credits.

Advanced level mentored reading and research for students with dissertator status.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2011

## SCIENCE AND TECHNOLOGY STUDIES (STS)

**STS 201 – WHERE SCIENCE MEETS SOCIETY**

3 credits.

An overview of science and technology studies. Explores science and technology as central institutions in modern societies. Teaches approaches to analyzing social dimensions of recent advances in areas such as genetics, environment, Internet, surveillance, and nanotechnology..

**Requisites:** Sophomore standing**Course Designation:** Breadth - Either Humanities or Social Science Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**STS 699 – DIRECTED STUDY**

1-3 credits.

Advanced directed study projects as arranged with a faculty member.

Requires completion of STS 201.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**STS/CURRIC 733 – PUBLIC ENGAGEMENT WITH SCIENCE**

3 credits.

Examines the influence of science in everyday life. Provides both academic context (research and theory) and a firsthand look at how science matters to people who are not themselves scientists.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2021**STS/CURRIC 734 – SCIENCE STUDIES AND SCIENCE EDUCATION**

3 credits.

Examination of the key ideas from the field of science and technology studies (history, philosophy, sociology of science, etc.) and how they have been taken up in both the school science curriculum as well as the science education research community.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**STS 901 – SCIENCE, TECHNOLOGY AND MEDICINE IN SOCIETY**

3 credits.

Key themes, issues and scholarship in the interdisciplinary fields of science and technology studies. Explores how different disciplinary perspectives contribute to and influence the questions, methods and theoretical approaches within particular fields of science studies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**STS 902 – CURRENT TOPICS IN SCIENCE AND TECHNOLOGY STUDIES**

1 credit.

Key themes, issues and scholarship in the interdisciplinary field of science and technology studies (STS). Participating faculty and speakers will be drawn from the social sciences, humanities, and physical and life sciences.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023



**STS 903 – SPECIAL TOPICS IN SCIENCE AND TECHNOLOGY STUDIES**

3 credits.

An interdisciplinary exploration of one or more high profile issues motivated debate and discussion among science and technology studies scholars.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**STS 999 – INDEPENDENT STUDY IN SCIENCE AND TECHNOLOGY STUDIES**

1-6 credits.

Independent study as arranged with a faculty member. Topics, readings, assignments and meetings will be outlined in a student-faculty "contract."

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

## SENIOR MEDICAL PROGRAM (SR MED)

**SR MED 913 – EXTRAMURAL ELECTIVE-PREVENTIVE MEDICINE**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**SR MED 921 – EXTRAMURAL ELECTIVE-ANESTHESIOLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 922 – EXTRAMURAL ELECTIVE-FAMILY MEDICINE**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 923 – EXTRAMURAL ELECTIVE-HUMAN ONCOLOGY**

1-26 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SR MED 924 – EXTRAMURAL ELECTIVE-MEDICINE**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 925 – EXTRAMURAL ELECTIVE-NEUROLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 926 – EXTRAMURAL ELECTIVE-OBSTETRICS AND GYNECOLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022



**SR MED 927 – EXTRAMURAL ELECTIVE-OPHTHALMOLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 928 – EXTRAMURAL ELECTIVE-PATHOLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**SR MED 929 – EXTRAMURAL ELECTIVE-PEDIATRICS**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**SR MED 931 – EXTRAMURAL ELECTIVE-PSYCHIATRY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**SR MED 932 – EXTRAMURAL ELECTIVE-RADIOLOGY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 933 – EXTRAMURAL ELECTIVE-REHABILITATION MEDICINE**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 934 – EXTRAMURAL ELECTIVE-SURGERY**

1-44 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SR MED 935 – EXTRAMURAL ELECTIVE-PRIMARY CARE**

1-16 credits.

Individually arranged elective for Phase 3 outside of the UW Madison Statewide Campus. Engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2017

**SR MED 936 – EXTRAMURAL ELECTIVE-EMERGENCY MEDICINE**

2-12 credits.

Clinical elective for fourth year medical students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SR MED 937 – EXTRAMURAL ELECTIVE CLERKSHIP IN INTERNATIONAL HEALTH**

1-8 credits.

One to eight week elective as a site outside the U.S. Students will engage in the provision of primary or specialty patient care in ambulatory and/or hospital settings. May include community public health, prevention, and health education learning activities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SR MED 951 – TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRIUMPH) I: SEMINAR AND PROJECTS**

2 credits.

Introduces third year students to health disparities in Milwaukee and community and public health improvement projects. Students will devote four hours per week to projects under the guidance of community mentors and faculty.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SR MED 953 – TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRIUMPH) II: MILWAUKEE**

2 credits.

Introduces third year medical students to the communities, neighborhoods, healthcare systems and public health initiatives in Milwaukee.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SR MED 955 – TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRIUMPH) III: LEADERSHIP**

2 credits.

Provides fourth year medical students with advanced leadership skill building exercises to address community and public health challenges in Milwaukee.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SR MED 957 – TRAINING IN URBAN MEDICINE AND PUBLIC HEALTH (TRIUMPH) IV: ADVANCED SEMINAR**

2 credits.

A continuation of TRIUMPH I (SR MED 951) that will enable fourth year medical students to explore and address health disparities and to complete a community or public health improvement project with colleagues in Milwaukee.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

# SLAVIC (SLAVIC LANGUAGES) (SLAVIC)

**SLAVIC 101 – FIRST SEMESTER RUSSIAN**

4 credits.

Introduction to speaking, listening, reading and writing in Russian, with an introduction to Russian culture.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 102 – SECOND SEMESTER RUSSIAN**

4 credits.

Introduction to speaking, listening, reading and writing in Russian, with an introduction to Russian culture.

**Requisites:** SLAVIC 101**Course Designation:** Frgn Lang - 2nd semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 105 – FIRST SEMESTER UKRAINIAN**

3 credits.

An introduction to the basics of the Ukrainian language and culture. Acquire elementary Ukrainian language skills in the four main areas: reading, writing, listening, and speaking. Pronunciation, formal/informal language, and colloquialisms.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**SLAVIC 111 – FIRST SEMESTER POLISH**

4 credits.

Introduction to speaking, listening, reading and writing in Polish, with an introduction to Polish culture.

**Requisites:** None**Course Designation:** Frgn Lang - 1st semester language course Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SLAVIC 112 – SECOND SEMESTER POLISH**

4 credits.

Introduction to speaking, listening, reading and writing in Polish, with an introduction to Polish culture.

**Requisites:** SLAVIC 111

**Course Designation:** Frgn Lang – 2nd semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 115 – FIRST SEMESTER CZECH**

4 credits.

Introduction to speaking, listening, reading and writing in Czech, with an introduction to Czech culture.

**Requisites:** None

**Course Designation:** Frgn Lang – 1st semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 116 – SECOND SEMESTER CZECH**

4 credits.

Introduction to speaking, listening, reading and writing in Czech, with an introduction to Czech culture.

**Requisites:** SLAVIC 115

**Course Designation:** Frgn Lang – 2nd semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 117 – INTENSIVE SECOND YEAR RUSSIAN**

4 credits.

Intensive development of speaking, listening, reading and writing skills in Russian, with continued study of Russian culture.

**Requisites:** SLAVIC 102

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SLAVIC 118 – INTENSIVE SECOND YEAR RUSSIAN**

4 credits.

Intensive development of speaking, listening, reading and writing skills in Russian, with continued study of Russian culture.

**Requisites:** SLAVIC 117

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SLAVIC 141 – FIRST SEMESTER SERBO-CROATIAN**

3 credits.

Introduction to primary language (speaking, listening, reading and writing) in Serbo-Croatian.

**Requisites:** None

**Course Designation:** Frgn Lang – 1st semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SLAVIC 142 – SECOND SEMESTER SERBO-CROATIAN**

3 credits.

Introduction to primary language (speaking, listening, reading and writing) in Serbo-Croatian.

**Requisites:** SLAVIC 141

**Course Designation:** Frgn Lang – 2nd semester language course

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SLAVIC 203 – THIRD SEMESTER RUSSIAN**

4 credits.

Development of speaking, listening, reading and writing skills in Russian, with continued study of Russian culture.

**Requisites:** SLAVIC 102

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 204 – FOURTH SEMESTER RUSSIAN**

4 credits.

Development of speaking, listening, reading and writing skills in Russian, with continued study of Russian culture.

**Requisites:** SLAVIC 203

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 207 – THIRD SEMESTER POLISH**

4 credits.

Development of speaking, listening, reading and writing skills in Polish, with continued study of Polish culture.

**Requisites:** SLAVIC 112

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 208 – FOURTH SEMESTER POLISH**

4 credits.

Development of speaking, listening, reading and writing skills in Polish, with continued study of Polish culture.

**Requisites:** SLAVIC 207

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 217 – THIRD SEMESTER CZECH**

4 credits.

Development of speaking, listening, reading and writing skills in Czech.

**Requisites:** SLAVIC 116

**Course Designation:** Frgn Lang – 3rd semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SLAVIC 218 – FOURTH SEMESTER CZECH**

4 credits.

Development of speaking, listening, reading and writing skills in Czech.

**Requisites:** SLAVIC 217

**Course Designation:** Frgn Lang – 4th semester language course  
Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SLAVIC 231 – HISTORY AND ETHICS ON FILM: POLISH CINEMA**

3 credits.

What constitutes heroism in the absence of universally shared moral frameworks? Who are we as individuals? What responsibility do we have for the way we represent reality to ourselves and to others? What constitutes "good life"? Engage with these questions and examine Polish cinematic tradition from the so-called Polish Film School to the present. Explore key works, themes, and creators of Polish cinema, and probe the ethical and existential dimensions these films open up. Consider various challenges faced by individuals when they lose connection to social, national, political, religious, and existential frameworks that used to define their identity, along with the strategies -- successful or not -- for maintaining one's selfhood and moral integrity in such crises

**Requisites:** None

**Course Designation:** Breadth – Humanities  
Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC/LITTRANS 238 – LITERATURE AND REVOLUTION**

3 credits.

Take a literary journey from St. Petersburg to Moscow, following the shifting cultural and political currents in Russia from the years preceding the 1917 Revolution to the rise of Stalinism in the 1930s. Topics in translation will include: revolutionary violence and terror, civil war and emigration, Futurism and the birth of Russian avant-garde art, Soviet feminism and the engineering of the "New Man," technological utopias and totalitarian dystopias, literature and early Soviet economic policy.

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 239 – PERFORMANCE AND POWER**

3 credits.

What does it mean "to perform" and what does performance do? How does performance help impose or challenge oppressive structures of power? Focusing on artists and authors like Sergei Eisenstein, Bertold Brecht, Marina Abramovic, and Pussy Riot, learn about political theater in the 20th and 21st centuries, the emergence and evolution of performance art and art actionism, the aesthetic and juridical functions of documentary theater and film, and the recent performative turn in New Left poetry.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 242 – LITERATURES AND CULTURES OF EASTERN EUROPE**

3 credits.

Introduction to the literature, culture and art of Eastern Europe.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SLAVIC 243 – CONTEMPORARY RUSSIA: HISTORY, POLITICS, AND CULTURE**

3 credits.

Post-Soviet Russia has been shaped by the tension between growing state violence and the slowly emerging public sphere of protest and activism. Crossing boundaries between literary, political, cultural, and art studies, draw on investigative journalism as well as contemporary Russian film, fiction, and art in order to explore the peculiar, yet not unprecedented cult of violence that underlies the Russian political climate and the alternatives suggested by activist opposition.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**SLAVIC 245 – TOPICS IN SLAVIC LITERATURES**

3 credits.

Exploration of various topics – periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SLAVIC 251 – THIRD SEMESTER SERBO-CROATIAN**

3 credits.

Development of speaking, listening, reading and writing in Serbo-Croatian.

**Requisites:** SLAVIC 142**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**SLAVIC 252 – FOURTH SEMESTER SERBO-CROATIAN**

3 credits.

Development of speaking, listening, reading and writing in Serbo-Croatian.

**Requisites:** SLAVIC 251**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**SLAVIC/GEOG/HISTORY/POLI SCI 253 – RUSSIA: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of Russian civilization from its beginnings through the present day.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC/GEOG/HISTORY/POLI SCI 254 – EASTERN EUROPE: AN INTERDISCIPLINARY SURVEY**

4 credits.

Comprehensive interdisciplinary survey of East European culture, society, politics, and literature from its beginnings to the present day.

**Requisites:** None**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SLAVIC/LITTRANS 266 – ELEMENTARY SPECIAL TOPICS IN RUSSIAN LITERATURE & CULTURE**

1-3 credits.

Exploration of various topics – periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature.

**Requisites:** None**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SLAVIC 275 – THIRD YEAR RUSSIAN I**

3 credits.

A thorough review of several major aspects of Russian grammar, focusing on the use of complex syntax in speech and writing. Read and discuss literary works and other Russian-language texts. Develop writing proficiency through compositions on a variety of topics.

**Requisites:** SLAVIC 118 or 204**Course Designation:** Breadth – Humanities

Frgn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 276 – THIRD YEAR RUSSIAN II**

3 credits.

A thorough review of several major aspects of Russian grammar, focusing on the use of complex syntax in speech and writing. Read and discuss literary works and other Russian-language texts. Develop writing proficiency through compositions on a variety of topics.

**Requisites:** SLAVIC 275**Course Designation:** Breadth – Humanities

Frgn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 277 – THIRD YEAR POLISH I**

3 credits.

Review of Polish grammar. Reading, oral practice, and composition.

**Requisites:** SLAVIC 208**Course Designation:** Frgn Lang – 5th + semester language course

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**SLAVIC 278 – THIRD YEAR POLISH II**

3 credits.

Review of Polish grammar. Reading, oral practice, and composition.

**Requisites:** SLAVIC 277**Course Designation:** Frgn Lang – 5th + semester language course  
Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 279 – INTENSIVE THIRD YEAR RUSSIAN**

8 credits.

A thorough review of several major aspects of Russian grammar, focusing on the use of complex syntax in speech and writing. Read and discuss literary works and other Russian-language texts. Develop writing proficiency through compositions on a variety of topics. Equivalent to SLAVIC 275 and 276.

**Requisites:** SLAVIC 118 or 204. Not open to students with credit for SLAVIC 275 or 276**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2016**SLAVIC 285 – SLAVIC CULTURE IN CONTEXT: AN HONORS COURSE**

3 credits.

Writing and discussion intensive seminar that introduces students to one or more Slavic (Russian, Polish, Serbian, Czech, Croatian, Bosnian) languages, literatures, and/or cultures within a global context.

**Requisites:** Declared in an Honors program**Course Designation:** Breadth – Humanities

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Honors – Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**SLAVIC 299 – DIRECTED STUDY**

1 credit.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**SLAVIC 301 – INTRODUCTION TO INTENSIVE POLISH**

3 credits.

Intensive coverage of the structure of the Polish language. Rapid introduction to reading and speaking.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 304 – FOURTH SEMESTER INTENSIVE POLISH**

4 credits.

Advanced grammar and reading: reading selections from various sources in Polish literature, history, and culture.

**Requisites:** SLAVIC 301**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 305 – FIFTH SEMESTER INTENSIVE POLISH**

3 credits.

Vocabulary reinforced through literature, film and journalism. Readings and discussions related to issues of contemporary Polish society. Continued work on grammar and vocabulary with written exercises and compositions.

**Requisites:** SLAVIC 304**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 306 – SIXTH SEMESTER INTENSIVE POLISH**

3 credits.

Continuation of 305. Reading selections from twentieth century Polish literature. Focus on intensive writing.

**Requisites:** SLAVIC 305**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 307 – STUDY ABROAD IN POLAND**

1-4 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**SLAVIC 308 – POLISH CULTURE AND AREA STUDIES ON STUDY ABROAD**

1-4 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions



**SLAVIC 309 – RUSSIAN AREA STUDIES ON STUDY ABROAD**

1-4 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**SLAVIC 310 – TOPICS IN RUSSIAN: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program.

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**SLAVIC 315 – RUSSIAN LANGUAGE AND CULTURE I**

3 credits.

Emphasizes speaking and listening skills. Converse on different stylistic levels, with varying degrees of formality, according to the rules of Russian speech etiquette.

**Requisites:** SLAVIC 118 or 204**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 316 – RUSSIAN LANGUAGE AND CULTURE II**

3 credits.

Emphasizes speaking and listening skills, learn to converse on different stylistic levels, with varying degrees of formality, according to the rules of Russian speech etiquette.

**Requisites:** SLAVIC 315**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 321 – FOURTH YEAR RUSSIAN I**

3 credits.

Improvement of Russian proficiency in all four skills. Read texts from literature and media, watch video clips from contemporary media sources, write and make presentations on current topics in the Russian-speaking world.

**Requisites:** SLAVIC 276**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 322 – FOURTH YEAR RUSSIAN II**

3 credits.

Improvement of Russian proficiency in all four skills. Progress in language proficiency from the Intermediate to the Advanced level in reading and listening, and to the Intermediate High level in speaking and writing. In addition, enriches knowledge about contemporary Russia through discussion of recent essays, journalism, and news articles.

**Requisites:** SLAVIC 321**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**SLAVIC 331 – FOURTH YEAR POLISH I**

3 credits.

Extensive reading, discussion, composition, and grammar review.

**Requisites:** SLAVIC 278**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 332 – FOURTH YEAR POLISH II**

3 credits.

Extensive reading, discussion, composition, and grammar review.

**Requisites:** SLAVIC 331**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 341 – FIRST SEMESTER INTENSIVE SERBO-CROATIAN**

3 credits.

Rapid introduction to Serbo-Croatian grammar, reading, and speaking.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**SLAVIC 342 – INTRODUCTION TO SERBIAN AND CROATIAN LITERATURE**

3 credits.

Introduction to the fundamentals of Serbian and Croatian literature. Learn how to speak, write and use the basic concepts of literary analysis: character, plot, setting, style, etc.

**Requisites:** SLAVIC 341**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019

**SLAVIC 351 – FIRST SEMESTER INTENSIVE CZECH**

3 credits.

Rapid introduction to Czech grammar, reading, and speaking.

**Requisites:** Consent of instructor**Course Designation:** Frgn Lang - 1st semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SLAVIC 352 – SECOND SEMESTER INTENSIVE CZECH**

3 credits.

Rapid introduction to Czech grammar, reading, and speaking.

**Requisites:** SLAVIC 351**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC/LITTRANS 357 – INTERMEDIATE SPECIAL TOPICS IN  
SLAVIC LANGUAGES AND LITERATURES**

3 credits.

Special topics in Slavic and Central and Eastern European Languages and Literatures.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities  
req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**SLAVIC/LITTRANS 361 – LIVING AT THE END OF TIMES:  
CONTEMPORARY POLISH LITERATURE AND CULTURE**

3 credits.

The collapse of communism and the posthumous triumph of the Solidarity movement started a new era in Polish culture. However, living in "posthistory" comes with its own set of problems. Examine contemporary Polish literature, film, and other cultural forms as they struggle with the country's turbulent past while trying to forge new collective identities for the future. How does culture mediate our relationship with the past? How does it help us understand the present and prepare for the future?

**Requisites:** LITTRANS 215 or SLAVIC 111**Course Designation:** Breadth - Literature. Counts toward the Humanities  
req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC/CURRIC/THEATRE 362 – DRAMA FOR TEACHING AND  
LEARNING**

3 credits.

Methods for all involved in teaching and learning, including foreign languages. Introduction to philosophy, methodology, and practice of the use of drama and performance techniques in any educational or recreational settings. Focus on creativity and embodied and contextual learning, based on current neurological, psychological, and sociological research. A practical class which includes demonstration and practice with children.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SLAVIC/LITTRANS 366 – INTERMEDIATE SPECIAL TOPICS IN  
RUSSIAN LITERATURE & CULTURE**

3 credits.

Exploration of various topics - periods, genres, individual writers, themes, problems, etc. in Russian and Eastern European literature at the intermediate level.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Literature. Counts toward the Humanities  
req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**SLAVIC 405 – WOMEN IN RUSSIAN LITERATURE**

3-4 credits.

The portrayal and perspectives of women, first in literature written by men in the nineteenth-century and then, primarily, by women writers in nineteenth-, twentieth- and twenty-first-century Russian literature. Examine works in their literary, historical, and cultural contexts.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities  
req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**SLAVIC 420 – CHEKHOV**

3-4 credits.

Examine works of Anton Chekhov in their literary, historical, and cultural context.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities  
req

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020

**SLAVIC 421 – GOGOL**

3-4 credits.

Examine works of Nikolai Gogol in their literary, historical, and cultural contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**SLAVIC 422 – DOSTOEVSKY**

3-4 credits.

Examine works of Dostoevsky in their literary, historical, and cultural contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SLAVIC 424 – TOLSTOY**

3-4 credits.

Examine works of Leo Tolstoy in their literary, historical, and cultural contexts.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 433 – HISTORY OF RUSSIAN CULTURE**

3 credits.

Focuses on those topics in Russian cultural history that are most often discussed by Russians and serve as the basis for contemporary political and media discourse.

**Requisites:** SLAVIC 321

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 434 – CONTEMPORARY RUSSIAN CULTURE**

3 credits.

Focuses on those topics in Russian cultural history that are most often discussed by Russians and serve as the basis for contemporary political and media discourse.

**Requisites:** SLAVIC 433

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 440 – SOVIET LITERATURE**

3-4 credits.

Examine literary works of the Soviet era in their cultural and historical context.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**SLAVIC 441 – THIRD SEMESTER INTENSIVE SERBO-CROATIAN**

3 credits.

Advanced reading and discussion, primarily twentieth century Serbian and Croatian literatures.

**Requisites:** SLAVIC 342 or Graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**SLAVIC 442 – FOURTH SEMESTER INTENSIVE SERBO-CROATIAN**

3 credits.

Advanced reading and discussion, primarily twentieth century Serbian and Croatian literatures.

**Requisites:** SLAVIC 441

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**SLAVIC/FOLKLORE 444 – SLAVIC AND EAST EUROPEAN FOLKLORE**

3 credits.

Oral traditional literature of Eastern Europe: ritual and lyric poetry, epic, and folktale.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SLAVIC 449 – HISTORY OF SERBO-CROATIAN LITERATURE**

3 credits.

Major literary movements of Serbian and Croatian literatures from the medieval period until the formation of the Yugoslav state in 1919. Readings in Serbo-Croatian.

**Requisites:** SLAVIC 342

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SLAVIC 451 – THIRD SEMESTER INTENSIVE CZECH**

3 credits.

Reading selections from various sources in Czech literature, history, and culture.

**Requisites:** SLAVIC 352

**Course Designation:** Frgn Lang – 3rd semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SLAVIC 452 – FOURTH SEMESTER INTENSIVE CZECH**

3 credits.

Reading selections from various sources in Czech literature, history, and culture.

**Requisites:** SLAVIC 451

**Course Designation:** Frgn Lang – 4th semester language course

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SLAVIC 454 – MODERN SERBO-CROATIAN LITERATURE**

3 credits.

Major literary movements of Serbian and Croatian literatures from the formation of the Yugoslav state in 1919 to the present. Readings in Serbo-Croatian.

**Requisites:** SLAVIC 449

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**SLAVIC 465 – ADVANCED READINGS IN RUSSIAN LITERATURE & CULTURE**

3 credits.

A focus on development of reading, writing, and speaking skills and on the interpretation of texts in their historical and cultural context.

**Requisites:** SLAVIC 321

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC/LITTRANS 467 – ADVANCED SPECIAL TOPICS IN SLAVIC LANGUAGES AND LITERATURES**

3 credits.

Special topics in Slavic and Central and Eastern European Languages and Literatures.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SLAVIC 470 – HISTORY OF POLISH LITERATURE UNTIL 1863**

3 credits.

Intensive study of major writers such as Kochanowski, Sep Szarzynski, Krasicki, Mickiewicz, and Slowacki. Readings in Polish.

**Requisites:** SLAVIC 302 or Graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SLAVIC 472 – HISTORY OF POLISH LITERATURE AFTER 1863**

3 credits.

A comprehensive survey of Polish literature and its historical background from 1863 to the present. Readings in Polish.

**Requisites:** SLAVIC 470 or Graduate/professional standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SLAVIC/THEATRE 532 – HISTORY OF RUSSIAN THEATRE**

3 credits.

The history of Russian theatre and related arts (including opera and ballet) with emphasis on performance history.

**Requisites:** Junior standing

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**SLAVIC 555 – ADVANCED RUSSIAN LISTENING & SPEAKING**

3 credits.

Development of advanced skills in Russian listening and speaking proficiency, with an emphasis on formal registers. Covers a variety of areas related to contemporary Russian-language media and culture necessary for a professional-level command of the language, regardless of the student's discipline.

**Requisites:** SLAVIC 321**Course Designation:** Frgn Lang - 5th + semester language course  
Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 560 – CAPSTONE SEMINAR IN RUSSIAN LITERATURE AND CULTURE**

3 credits.

History of Russian social and political satire in depth. Taught in Russian.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SLAVIC 681 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Summer 2012**SLAVIC 682 – SENIOR HONORS THESIS**

3 credits.

Individual mentored study for seniors completing theses for Honors in the Major as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2015**SLAVIC 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SLAVIC 701 – SURVEY OF OLD RUSSIAN LITERATURE**

2 credits.

Readings of Russian Literature from the Byzantine through the 17th century.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**SLAVIC 702 – EIGHTEENTH-CENTURY RUSSIAN LITERATURE**

2 credits.

Readings of Russian Literature in the 18th century and beyond.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**SLAVIC 703 – FOUNDATIONS IN RUSSIAN ROMANTICISM**

3 credits.

Introduction to Russian Romanticism. Provides a solid foundation in both primary texts and secondary scholarship in the field.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2020**SLAVIC 705 – SPECIAL TOPICS IN RUSSIAN LANGUAGE/ LINGUISTICS**

3 credits.

Topics in Russian Language and Linguistics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**SLAVIC 707 – FOUNDATIONS IN RUSSIAN REALISM (~1840-1890S)**

3 credits.

Covers masterworks of the 19th century and the broader literary, historical, political, intellectual and cultural contexts in which they arose and which they shaped.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SLAVIC 708 – FOUNDATION IN RUSSIAN MODERNISM (~1890S-1930S)**

3 credits.

Introduction to various trends in Russian Modernist literature from the 1890s through the 1930s.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**SLAVIC 709 – FOUNDATION IN SOVIET, EMIGRE, AND POST-SOVIET LITERATURE (~1930-PRESENT)**

3 credits.

Covers Soviet, Emigre, and Post-Soviet periods of Russian literature.

Engage with the movements and conceptual issues shaping and influencing the production of Russian/Soviet literary texts from 1917 until the present day: e.g., realism, socialist realism, exile (internal and external), dissidence, postmodernism.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SLAVIC 755 – TOPICS IN SLAVIC LITERATURE**

1-3 credits.

Topics in Russian and Slavic literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SLAVIC 799 – INDEPENDENT STUDY**

1-6 credits.

Advanced independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SLAVIC 800 – PROSEMINAR-SLAVIC LITERATURE AND CULTURE**

1 credit.

An introduction to SLAVIC faculty, the Slavic field in general, and research methods in Slavic.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 801 – SLAVIC CRITICAL THEORY AND PRACTICE**

3 credits.

Introduction to the original works of major trends representing literary theory in the Slavic world and wider: formalism, materialism, structuralism, semiotics, deconstruction, psychoanalysis, gender-based theory and other relevant theories that have influenced the way we treat literature as a cultural and aesthetic practice.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SLAVIC 802 – THE STRUCTURE OF RUSSIAN**

2 credits.

Provides a theoretical and practical introduction to the linguistic structure of Contemporary Standard Russian.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SLAVIC 803 – INTRODUCTION TO OLD CHURCH SLAVONIC AND THE HISTORY OF RUSSIAN LITERARY LANGUAGE**

2 credits.

Introduction to Old Church Slavonic (OCS) and its impact on the formation of Russian literary language.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SLAVIC 804 – METHODS OF TEACHING SLAVIC LANGUAGES**

2 credits.

Investigate the history of foreign language instruction, various models of adult foreign language acquisition, methods for teaching Russian, the creation of testing instruments, issues relevant to course design, and criteria for textbook selection.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SLAVIC 820 – COLLEGE TEACHING OF RUSSIAN**

1 credit.

Provides important professional development in course design, lesson planning, and assessment for teaching assistants. Work cooperatively to develop course activities and assessment instruments, and learn how to identify and solve problems in the classroom. Must be a teaching assistant in Russian.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**SLAVIC 891 – APPRENTICESHIP IN TEACHING**

1 credit.

Professional development in the pedagogy of literature, culture, and advanced language teaching.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**SLAVIC 892 – APPRENTICESHIP IN WRITING**

1 credit.

Professional development on advanced writing and publication in the field.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**SLAVIC 900 – SEMINAR: SLAVIC LITERATURE AND CULTURE**

1-3 credits.

Seminar topics related to Slavic literature and culture.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SLAVIC 991 – INDIVIDUAL RESEARCH-SLAVIC LITERATURE**

1-12 credits.

Independent research and writing under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## SOCIAL AND ADMINISTRATIVE PHARMACY (S&A PHM)

**S&A PHM/NURSING/SOC WORK 105 – HEALTH CARE SYSTEMS: INTERDISCIPLINARY APPROACH**

2 credits.

Introduction to health care systems. Factors affecting health and the value placed on health, the delivery of health care in different settings, the roles of various health workers, and the sociological and economic aspects of health care.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM/HIST SCI 401 – HISTORY OF PHARMACY**

2 credits.

Pharmaceutical field, from antiquity to modern medical care; professional; structuring in principal countries of the West.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**S&A PHM 411 – PHARMACY IN THE HEALTH CARE SYSTEM**

3 credits.

The course goals are to help student pharmacists: 1) increase their knowledge of the U.S. health care system, (2) understand insurance coverage for health care, prescription drugs, and pharmacist services, (3) identify ethical issues in healthcare, apply a problem-solving framework to analyze dilemmas, and make decisions regarding appropriate courses of action.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**S&A PHM 414 – SOCIAL AND BEHAVIORAL ASPECTS OF PHARMACY PRACTICE**

3 credits.

The goals of this course are to introduce students to psychosocial and behavioral aspects of pharmacy practice and patient care, including (1) the pharmacist's role in patient care and public health; (2) patient perspective and factors related to health and medication use; (3) patient-pharmacist interaction and communication; and (4) principles of personnel management in pharmacy practice.

**Requisites:** S&A PHM 411

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM 490 – SELECTED TOPICS IN SOCIAL AND ADMINISTRATIVE PHARMACY**

1-4 credits.

Specialized subject matter of current interest to undergraduate and professional students.

**Requisites:** Declared in Doctor of Pharmacy program

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**S&A PHM 514 – MANAGING PHARMACY SYSTEMS FOR PATIENT CARE**

2 credits.

Introduces concepts and principles related to managing pharmacy operations and systems for patient care, and managing financial aspects of pharmacies.

**Requisites:** Declared in Doctor of Pharmacy program with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM 611 – PHARMACY LAW AND REGULATION**

2-3 credits.

Federal and Wisconsin laws related to drug manufacture, drug distribution, drug use, and pharmacy practice.

**Requisites:** S&A PHM 514

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM 652 – PHARMACIST COMMUNICATION: EDUCATIONAL AND BEHAVIORAL INTERVENTIONS**

2 credits.

Intermediate principles of pharmacist communication with patients and other care givers; weekly communications laboratory provides opportunity to refine skills in listening, interviewing, counseling, and use of various educational and behavioral strategies to improve drug use.

**Requisites:** S&A PHM 411 and Declared in the Doctor of Pharmacy Program with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM 699 – ADVANCED INDEPENDENT STUDY**

0-3 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**S&A PHM 701 – GRANT WRITING FOR HEALTH SERVICES RESEARCH**

2 credits.

Prepare to enter professional careers requiring knowledge of grant-writing. Mechanics of proposal writing and social aspects of "grantsmanship," skill development in identifying sources of grant funding, practice research to support applications, and tailor proposals to specific audience interests. Utilizing an iterative and peer supported process, draft parts of an R36 dissertation grant.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**S&A PHM 702 – MIXED METHODS FOR HEALTH SCIENCES: PURPOSE, DESIGN AND APPROACH**

2 credits.

Increase awareness, understanding, and knowledge about how mixed methods research fits into the broader world of health services research. Exposure to research and lay literature in health services research in pharmacy and related fields. Improve ability to write technically, read and interpret mixed methods research articles, and discuss implications of research findings.

**Requisites:** Graduate standing only or declared in the Doctor of Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**S&A PHM 703 – COMMUNITY ENGAGEMENT IN HEALTH SERVICES RESEARCH**

2 credits.

Apply principles of community engagement in the field of health services research. Read and interpret relevant articles, and discuss implications of these readings. Learn existing models and practical approaches for successfully partnering with community stakeholders to address health and medication-related needs through research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**S&A PHM 704 – DISSEMINATION, IMPLEMENTATION AND SUSTAINMENT OF CHANGE IN HEALTH SERVICES RESEARCH**

2 credits.

Apply Dissemination and Implementation (DI) as well as sustainability concepts and principals to support organizational change efforts in different healthcare settings or learn how to conduct Sustainability research in their professional careers. Identify DI frameworks, appropriate implementation strategies, study designs and outcomes to address the implementation of an evidence-based practice or a specific organizational change.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**S&A PHM 711 – RESEARCH METHODS FOR PHARMACEUTICAL OUTCOMES AND POLICY RESEARCH**

3 credits.

Development of skills in the methods, techniques, and problems encountered in conducting evaluations of pharmaceutical services, programs, and policies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **S&A PHM 715 – SOCIAL BEHAVIORAL THEORIES IN PHARMACY, DRUG USE, AND HEALTH BEHAVIOR**

3 credits.

Critical review and application of social behavioral theories, methodologies, and research to current problems in pharmacy, pharmacist communication and interaction with consumers and other providers, use of prescription and nonprescription drugs, and self-care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **S&A PHM 716 – ADVANCED HOSPITAL PHARMACY ADMINISTRATION**

2 credits.

Various components necessary to become an accomplished administrator of a pharmacy department in a hospital or organized health care setting.

**Requisites:** Declared in MS Pharmacy program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **S&A PHM 911 – RESEARCH SEMINAR IN SOCIAL & ADMINISTRATIVE PHARMACY**

1 credit.

Exposes students to research related to SAS topics, discuss strategies for writing research theses and articles, discuss various methodological approaches to answering research questions, and improve oral and written communication skills. Seminars may involve presenting completed and/or planned research, leading discussions among seminar participants about research topics, and discussing written assignments.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

### **S&A PHM 990 – RESEARCH**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **S&A PHM 999 – ADVANCED INDEPENDENT STUDY**

1-12 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## **SOCIAL WORK (SOC WORK)**

### **SOC WORK 100 – SO YOU WANT TO CHANGE THE WORLD?**

3 credits.

Examine ideas and values related to making a difference, think critically about the meaning and methods of changing the world, and integrate thoughtful evidence with your values and beliefs about doing good in the world. With a focus on the profession of social work and other helping professions, consider a variety of social problems, and investigate and critique various approaches to creating change to improve social problems.

**Requisites:** First year students or first year transfer students only

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK/NURSING/S&A PHM 105 – HEALTH CARE SYSTEMS: INTERDISCIPLINARY APPROACH**

2 credits.

Introduction to health care systems. Factors affecting health and the value placed on health, the delivery of health care in different settings, the roles of various health workers, and the sociological and economic aspects of health care.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 205 – INTRODUCTION TO THE FIELD OF SOCIAL WORK**

4 credits.

Historical development, formation of social welfare policies, and the role of the social work professional.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 206 – INTRODUCTION TO SOCIAL POLICY**

4 credits.

Provides an awareness of problems and concepts of the policy process in the U.S. Explores the political, economic, and institutional frameworks which structure public social welfare choices.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 275 – CONTEMPORARY ISSUES IN SOCIAL WELFARE**

1-3 credits.

Topics will vary, reflecting new issues and trends in social services, social welfare, or social work.

**Requisites:** Freshman or sophomore standing only

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**SOC WORK 299 – DIRECTED STUDY**

1-3 credits.

Program of study devised by a student in collaboration with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**SOC WORK 375 – CONTEMPORARY ISSUES IN SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting current issues and trends in social justice, social welfare, and social work.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 400 – FIELD PRACTICE AND INTEGRATIVE SEMINAR I**

2-6 credits.

An approved generalist field seminar and social work community agency placement. Seminar and placement require a minimum of 16 hours/week. The first course of the two-semester generalist field sequence.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 401 – FIELD PRACTICE AND INTEGRATIVE SEMINAR II**

2-6 credits.

An approved generalist field seminar and social work agency placement. Seminar and placement require a minimum of 16 hours per week. The second course of the two-semester generalist field sequence.

**Requisites:** SOC WORK 400 and declared in Bachelor or Master of Social Work program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 420 – POVERTY AND SOCIAL WELFARE**

3 credits.

Nature and dimensions of poverty in the U.S. Individual and social consequences of poverty. Historic and contemporary approaches. Poverty and social welfare policy and programs.

**Requisites:** Sophomore standing and SOC WORK 206

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK/SOC 422 – SOCIAL ISSUES IN AGING**

3 credits.

Origins, nature, scope and dynamics of the social problems of older adults and their families in the U.S. and to acquaint students with programs and services available to older adults.

**Requisites:** Sophomore standing and (SOC WORK 205, SOC 181, CE SOC/SOC/C&E SOC 140, 210 or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 440 – PRACTICE I: FOUNDATIONS OF GENERALIST PRACTICE**

1-2 credits.

Provides a conceptual base for generalist social work practice at all intervention levels. Helps students learn social work purposes, values, ethics, processes, roles, methods, and integrate social work theory and practice.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**SOC WORK 441 – GENERALIST PRACTICE WITH INDIVIDUALS, FAMILIES AND GROUPS**

3 credits.

Develops generalist social work knowledge and skills for working with and on behalf of individuals, families, and groups. Focus on development of basic social work direct practice skills.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 442 – GENERALIST PRACTICE WITH COMMUNITIES AND ORGANIZATIONS**

1-2 credits.

Exposes students to the theory and practice of planned change in communities and organizations and helps them incorporate a generalist model into practice at these levels of intervention.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 453 – SUBSTANCE USE DISORDERS**

3 credits.

Presentation of social, historical, legal, political, and ethical considerations surrounding the use and abuse of alcohol and psychotropic drugs in the U.S.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 454 – SMALL GROUPS IN SOCIAL WORK PRACTICE**

3 credits.

Exploration and application of theory to the formation and development of small groups deliberately used by social workers to effect specified change in interpersonal relationships.

**Requisites:** Sophomore standing and SOC WORK 205

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SOC WORK 457 – HUMAN BEHAVIOR AND THE ENVIRONMENT**

3 credits.

Physiological, psychological, and social changes throughout the life cycle. Major crisis and developmental tasks at each point in terms of their implications for social work practice.

**Requisites:** Junior standing and declared in Social Welfare or Social Work undergraduate program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 462 – CHILD WELFARE**

3 credits.

Supportive, supplementary, and substitute child welfare services employed in dealing with the problems of dependent, neglected, delinquent children. Scope, method, problems, trends of the services; child welfare in other countries; sociology of the child welfare worker.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 523 – FAMILY VIOLENCE**

3 credits.

An overview of the risk factors and trauma effects of the major forms of family violence. Models of prevention and intervention will be described. Attitudes about family violence will be explored. Basic skills for detecting abuse and making referrals will be taught.

**Requisites:** Declared in Social Welfare, Human Development and Family Studies BS, or Social Work BSW

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 575 – COMMUNITY DEVELOPMENT IN SOCIAL WELFARE**

3 credits.

Analysis of theory and practice of community development in selected cultural settings in the U.S. and other countries; role of community development in social welfare systems; problems and techniques of developing local citizen interest and leadership; community development in relation to other social work methods and community institutions and processes.

**Requisites:** Junior standing and declared in Social Welfare or Social Work undergraduate program

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**SOC WORK 578 – HOMELESSNESS: A SERVICE LEARNING COURSE**

4 credits.

Introduction to the complex issues surrounding homelessness in America including epidemiology, demographics, history and public beliefs and attitudes. It explores structural conditions and personal attributes posited as causes of contemporary homelessness. Varying social policies and service needs of homeless persons are discussed.

**Requisites:** Junior standing and declared in Social Welfare undergraduate program

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**SOC WORK 579 – SPECIAL TOPICS IN SOCIAL WORK**

1 credit.

Intensive study of selected topics in the field of social work.

**Requisites:** Junior standing and declared in Social Welfare or Social Work undergraduate program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**SOC WORK 605 – THE FIELD OF SOCIAL WORK**

2 credits.

Nature, purpose, function, and organizational content of the profession. Historical development; a consideration of the development of the social welfare institutions, formation of social welfare policies and their impact on practice, and the role of the social work professional.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 606 – SOCIAL POLICY**

2 credits.

Analysis of policy issues as applied to such fields as poverty, discrimination, crime, physical and mental health on both national and state levels.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 612 – PSYCHOPATHOLOGY IN GENERALIST SOCIAL WORK PRACTICE**

2 credits.

Prepares generalist foundation social work students to recognize major mental health concerns across the lifespan. Includes an introduction to the Diagnostic and Statistical Manual of Mental disorders (DSM) as the organizing framework for reviewing major mental disorders and critique of the current "medical model" approach to mental health in the United States. Considers mental health issues from a generalist perspective including the role of the social environment, culture and stigma in mental health services, access and policy.

**Requisites:** Declared in Social Work BSW, Social Work MSW or Post Baccalaureate Enrichment Special student

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 624 – SOCIAL WORK WITH THE SMALL GROUP**

2-3 credits.

Exploration of the small group as the interventive unit; major models and techniques; principles guiding the selection of the small group approach to intervention based on research knowledge of problems, processes, and outcomes.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SOC WORK 626 – SOCIAL WORK WITH THE COMMUNITY**

2-3 credits.

Community relationships in public and voluntary social services; principles of community organization and social welfare administration.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**SOC WORK 627 – SEX TRAFFICKING AND SEX TRADING**

2 credits.

Anti-oppressive approaches to analyzing the dynamics of sex trading (including sex trafficking and sex work) as well as implications for practice and policy. Integrates diverse and conflicting perspectives of survivors, practitioners, and researchers to deconstruct sex trafficking risk, prevention, identification, and intervention strategies.

**Requisites:** Junior standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SOC WORK/AMER IND 636 – SOCIAL WORK IN AMERICAN INDIAN COMMUNITIES: THE INDIAN CHILD WELFARE ACT**

3 credits.

The role of social workers and social services in American Indian and tribal communities, particularly compliance with the Indian Child Welfare Act. Historical context includes land removal and loss, the boarding school and adoption eras, and social determinants of health including the impacts of historical and intergenerational trauma.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



### **SOC WORK 639 – GAY, LESBIAN, BISEXUAL, AND TRANSGENDER (GLBT) INDIVIDUALS AND SOCIAL WELFARE**

2-3 credits.

Introduction to contemporary topics related to the social welfare of gay, lesbian, bisexual and transgender (GLBT) individuals. Issues addressed are related to development, health disparities, family, research, history, and ethics. Designed to enhance student understanding of issues related to GLBT individuals in America. A life cycle perspective will be presented to highlight the unique issues of LGBT people at various stages of human development. Overlapping sexual orientation, in addition to these generational considerations, are the many other aspects of diversity present in the LGBT community, including race, ethnicity, class, gender, physical and mental abilities, religion, and national origin. Exposure to empirical literature on LGBT issues that will inform their understanding of past, present, and future challenges facing the LGBT community in light of its many complexities.

**Requisites:** Declared in Social Welfare, Social Work BSW, LGBTQ+Studies Certificate, or Social Work MSW

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 640 – DIVERSITY, OPPRESSION AND SOCIAL JUSTICE IN SOCIAL WORK**

3 credits.

Foundational knowledge for generalist social work practice in a multicultural society. Examines the experiences of diverse populations with interpersonal and institutional oppression, and implications are drawn for social policy.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOC WORK 642 – SOCIAL WORK AND ADOLESCENTS**

2-3 credits.

Drawing on multiple theoretical perspectives and a critical review of the literature, students explore practice implications and interventions regarding problems of adolescents and at-risk youth with a focus on environmental influences that affect normal development.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

### **SOC WORK 643 – SOCIAL WORK AND DELINQUENCY**

2-3 credits.

Social work interventions and services to youth who are troubled and delinquent. Etiological factors that contribute to mental health issues experience by this population are examined. These factors along with a basic conceptual understanding of child and adolescent psychopathology will be applied to social work process of assessment, treatment and prevention for this population.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **SOC WORK 644 – ISSUES IN DEVELOPMENTAL DISABILITIES**

3 credits.

Definition, incidence, etiology, and prevention of developmental disabilities. Examines the life-cycle needs of this population, as well as social-welfare issues, social services available, and the social worker's role.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 646 – CHILD ABUSE AND NEGLECT**

2 credits.

Examination of physical, emotional and sexual abuse of children, child neglect, and exploitation.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 648 – PALLIATIVE AND END-OF-LIFE CARE SOCIAL WORK PRACTICE**

2 credits.

Focuses on social work practice with children, adolescents, adults and elders who have terminal illness, as well as their families.

**Requisites:** Declared in Social Work BSW or Social Work MSW

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 650 – METHODS OF SOCIAL WORK RESEARCH**

2-3 credits.

Social research and problems of project design and programming. Distinctive characteristics of investigations directed to planning, administrative, and scientific objectives.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 656 – FAMILY PRACTICE IN FOSTER AND KINSHIP CARE**

2-3 credits.

Social welfare issues from national and local perspective, research, and foster care practice.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 659 – INTERNATIONAL ASPECTS OF SOCIAL WORK**

2-3 credits.

Challenges of cross-cultural social work practice with individuals, groups or organizations doing humanitarian work and social development around the world are increasingly affected by global phenomena such as migration, refugees and displaced persons, environmental degradation, climate change and natural disaster, war and civil strife, terrorism and insecurity. Approaches to international practice include community participation, sustainable development, addressing root causes of problems, and promoting human rights and social justice.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**SOC WORK 661 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting issues and trends in social welfare.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**SOC WORK 662 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting issues and trends in social policy and social work.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**SOC WORK 663 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting social issues/social problems relevant to social welfare and social work.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

**SOC WORK 664 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting new issues and trends in fields of practice such as child welfare, health, or mental health.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**SOC WORK 665 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting new issues and trends in macro or indirect social work practice such as work at the organizational or community levels.

**Requisites:** Junior standing and declared in Social Welfare or Social Work

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**SOC WORK 672 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting issues and trends in social work for non-social workers.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**SOC WORK 673 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary and designed to meet MSW Program requisites.

**Requisites:** Junior standing and declared in Social Welfare or Social Work**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2020**SOC WORK 674 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting emerging issues and trends in social work for social welfare, generalist and advanced practice students.

**Requisites:** Junior standing and declared in Social Welfare or Social Work**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**SOC WORK 675 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting issues and trends in social policy and social work for social welfare, generalist and advanced students.

**Requisites:** Junior standing and declared in Social Welfare or Social Work**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC WORK 676 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting emerging issues and trends in social work practice.

**Requisites:** Junior standing and declared in Social Welfare or Social Work**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2016**SOC WORK 679 – TOPICS IN CONTEMPORARY SOCIAL WELFARE**

2-3 credits.

Topics will vary, reflecting trends in policy and practice for social welfare, generalist, and advanced students.

**Requisites:** Junior standing and declared in Social Welfare or Social Work**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**SOC WORK 681 – SENIOR HONORS THESIS**

3 credits.

First of two semesters of undergraduate research for students in the honors program leading to completion of thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Fall 2021**SOC WORK 682 – SENIOR HONORS THESIS**

3 credits.

Second of two semesters of undergraduate research for students in the honors program including completion of a thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SOC WORK 691 – SENIOR THESIS**

2 credits.

First of two semesters of undergraduate research leading to completion of thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2003**SOC WORK 692 – SENIOR THESIS**

2 credits.

Second of two semesters of undergraduate research including completion of a thesis.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2004**SOC WORK 699 – DIRECTED STUDY**

1-3 credits.

Independent study for undergraduates under the direction of a Social Work instructor. Only juniors and seniors will be given permission to enroll.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**SOC WORK 700 – PART-TIME MSW PROGRAM EXEMPTION TERM**  
0 credits.

Course for students in the Part-Time MSW Program to maintain UW-Madison status when they have partial exemptions and no other courses available.

**Requisites:** Declared in Social Work, MSW, or Part-Time MSW, Madison, or Part-Time MSW, Eau Claire

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**SOC WORK 705 – BASIC STATISTICS FOR SOCIAL WORK**  
3 credits.

An overview of statistical methods covering the topics required for social work professional degrees, such as distributions, standard error, regression, correlation assumptions and limitations, and basic ideas of experimental design.

**Requisites:** Graduate/professional standing or declared in the Preparation for Admission to Graduate or Professional School Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SOC WORK 710 – DIVERSITY, OPPRESSION AND SOCIAL JUSTICE IN SOCIAL WORK**  
2 credits.

Foundational preparation for social work practice in a multicultural society. Examines the experiences of diverse populations with interpersonal and institutional oppression and implications are drawn for social policy.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 711 – HUMAN BEHAVIOR AND THE ENVIRONMENT**  
2 credits.

The literature on human behavior and the environment is reviewed from a bio-psychosocial perspective. Special attention is given to understanding individual and family behavior and development as a function of reciprocal interactions with groups, communities, organizations, and society.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 712 – PSYCHOPATHOLOGY FOR SOCIAL WORK PRACTICE IN MENTAL HEALTH**  
3 credits.

Focuses on a biopsychosocial understanding of mental wellbeing and mental illness from a social work and social environment perspective. It gives special attention to the social work view in relation to the person-in-environment and other classification systems available to the practitioner. Emphasizes an appreciation of the critical influence of culture, class, race and ethnicity, religion, and social values of the individual, family, group, and social institutions in the assessment of client strengths and vulnerabilities. Critically reviews current classification systems and major theories regarding the nature of mental disorders, their diagnoses and etiologies, and the treatment approaches available to help people in their recovery.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK/URB R PL 721 – METHODS OF PLANNING ANALYSIS**  
3 credits.

Research methods and statistics used in analyzing planning problems: conceptualization, design, and implementation of planning research; statistical methods for analyzing data including review of inferential statistics, analysis of variance, correlation, and multiple regression; use of computer; review of sources of planning data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 741 – INTERVENTIONS WITH CHILDREN, YOUTH, AND FAMILIES**  
2 credits.

Addresses multi-level interventions with children, youth, and families across multiple service systems, with an emphasis on practice innovations.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 742 – ASSESSING AND TREATING CHILDREN AND ADOLESCENTS**  
2 credits.

An advanced practice course on social work treatment methods with children and adolescents from a cognitive behavioral perspective. Assessment, treatment, and generalization of change strategies; problem-solving; resource development; intervention planning and other practice issues are explored.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK/NURSING/PHM PRAC 746 – INTERDISCIPLINARY CARE OF CHILDREN WITH SPECIAL HEALTH CARE NEEDS**

3 credits.

Interdisciplinary team care of children with special health care needs across the trajectory of illness presented within the context of family, culture, social determinants of health, community, and healthcare policy. Students introduced to interdisciplinary, collaborative, family-centered team care.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 799 – INDEPENDENT STUDY**

1-6 credits.

Independent study for MSW graduate students.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **SOC WORK 800 – FIELD PRACTICE AND INTEGRATIVE SEMINAR III**

2-6 credits.

An approved advanced generalist field seminar and placement linked to areas of focus. Seminar and placement require a minimum of 20 hours per week.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOC WORK 801 – FIELD PRACTICE AND INTEGRATIVE SEMINAR IV**

2-6 credits.

An approved advanced generalist seminar and placement linked to areas of focus. Seminar and placement require a minimum of 20 hours/week.

**Requisites:** SOC WORK 800 and declared in Social Work, MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 815 – SOCIAL WORK PRACTICE IN SCHOOLS I**

2 credits.

Practice and coursework in educational settings to conceptualize social work skills in schools and to integrate knowledge of social work theory and practice.

**Requisites:** Declared in Social Work MSW or in the Professional or Personal Enrichment Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOC WORK 816 – SOCIAL WORK PRACTICUM IN SCHOOLS I**

1 credit.

Practicum and supervision in school settings.

**Requisites:** Declared in Post-Bachelor's Personal Professional Development program and concurrent enrollment in SOC WORK 815

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOC WORK 817 – SOCIAL WORK PRACTICE IN SCHOOLS II**

2 credits.

Advanced practice and coursework in educational settings to conceptualize social work skills in schools and to integrate knowledge of social work theory and practice.

**Requisites:** Declared in Social Work MSW or in the Professional or Personal Enrichment Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 818 – SOCIAL WORK PRACTICUM IN SCHOOLS II**

1 credit.

Practicum and supervision in school settings.

**Requisites:** Declared in Post-Bachelor's Personal Professional Development program, SOC WORK 816, and concurrent enrollment in SOC WORK 817

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK 821 – SOCIAL WORK PRACTICE IN AGING AND MENTAL HEALTH**

2 credits.

Prepares front line social workers to address mental health needs of older adults and their family members. Examines common mental health conditions, assessment, planning, evidence-based individual, family and group interventions, resources, cultural competence, ethical issues, and contexts for practice.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC WORK/LAW 822 – FAMILY LAW: MARRIAGE AND DIVORCE**

2-4 credits.

Marriage and less formal spousal relationships, husband-wife relationships in on-going marriage; divorce and its economic and custody consequences; post-divorce relationships.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**SOC WORK/LAW 823 – FAMILY LAW: PARENT AND CHILD**

3-4 credits.

The relationship of parent and child; the rights of unmarried mothers and fathers and their children; parental rights to custody vis a vis third parties; parents' rights to make decisions affecting children; neglect; termination of parental rights; the foster care system and adoption.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**SOC WORK 825 – GRIEF, DEATH, LOSS AND LIFE**

2 credits.

Introduces social work students to the nature and centrality of the experience of loss and subsequent grief in their personal lives, in the lives of their clients, and in their role as professional helpers.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SOC WORK 835 – ADVANCED SOC WORK PRACTICE IN MENTAL HEALTH**

1-2 credits.

Focuses on the core practice theories, conceptual frameworks, and intervention skills necessary for social work practice in mental health.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SOC WORK 836 – MENTAL HEALTH POLICIES AND SERVICES**

2-3 credits.

Prepares students for leadership roles in mental health programs, agencies and organizations. Examines mental health policies and services that influence care and treatment of persons with mental illness and shape mental health care systems, programs and services.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 840 – ADVANCED MACRO PRACTICE**

2 credits.

Explores multiple approaches social workers use to influence groups, organizations, communities and systems. Concepts, theories and models of macro level practice and advanced practice skills for addressing complex practice and organizational situations are examined.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 842 – CONSULTATION AND SUPERVISION IN SOCIAL WORK**

2-3 credits.

Learning patterns, principles and methods of supervision and consultation.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 852 – INFLUENCING POLITICAL SYSTEMS FOR SOCIAL CHANGE**

2 credits.

The focus on Social Work political advocacy strategies in public policy and government settings. To best prepare social workers seeking to impact public policy and social change and improve the social and economic status of individuals, families, communities and systems, examine the knowledge and political skills, strategies, techniques and actions which influence elected officials and policy makers and the policies, practices, programs, services and resources they establish for people in need through local, state and federal units of government.

**Requisites:** Declared in Social Work MSW, or Public Affairs MPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SOC WORK 854 – CRISES INTERVENTION IN SOCIAL WORK**

2-3 credits.

Meaning of crisis to client systems and social work practitioners; principles guiding rational decision to intervene at the point of "critical incident".

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 860 – RECENT DEVELOPMENTS IN SOCIAL WORK**

1-3 credits.

Topics vary and focus on generalist practice.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**SOC WORK 861 – RECENT DEVELOPMENTS IN SOCIAL WORK**

1-3 credits.

Topics vary and focus on advanced practice.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020



**SOC WORK 862 – RECENT DEVELOPMENTS IN SOCIAL WORK**

2-3 credits.

Topics vary and focus on social policy and services.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016**SOC WORK 863 – RECENT DEVELOPMENTS IN SOCIAL WORK**

2-3 credits.

Topics vary and focus on social problems/social issues.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**SOC WORK 869 – RECENT DEVELOPMENTS IN SOCIAL WORK**

2-3 credits.

Topics vary and focus on advanced generalist practice.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**SOC WORK 870 – COGNITIVE AND BEHAVIORAL MENTAL HEALTH TREATMENTS FOR ADULTS**

2 credits.

Evidence-based cognitive and behavioral interventions used by social workers in the treatment of mental health challenges.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC WORK 873 – SOCIAL WORK PRACTICE IN HEALTH CARE**

2 credits.

Develops advanced practice knowledge and skills for social workers practicing in health and health care settings.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC WORK 874 – ADVANCED PRACTICE IN HEALTH, AGING, AND DISABILITY**

2 credits.

Develops advanced practice knowledge and skills related to practice issues common to social workers practicing in the areas of aging, health, and/or disability.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**SOC WORK 875 – HEALTH, AGING, AND DISABILITY POLICY AND SERVICES**

2 credits.

Provides knowledge about the contemporary organization of health care, as well as policies and services for older adults and people with disabilities.

**Requisites:** Declared in Social Work MSW**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC WORK/ED PSYCH/HDFS/NURSING 880 – PREVENTION SCIENCE**

3 credits.

This course provides a theoretical, empirical and practical foundation for prevention science as it relates to the prevention of human social problems. Research and evaluation methods, program design strategies, best practices and policy as they relate to the field of prevention are also examined. Intended for 2nd year graduate students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC WORK/ED PSYCH/HDFS/NURSING 881 – CAPSTONE SEMINAR IN PREVENTION SCIENCE**

1 credit.

This course provides an opportunity for students to meet with prevention professionals and scholars from across campus and the community to explore current and emerging issues of prevention research and professional practice. Students must complete HDFS/ED PSYCH/NURSING/SOC WORK 880 before taking this course.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**SOC WORK/PUB AFFR 887 – NONPROFIT LEADERSHIP**

3 credits.

Nonprofit leadership focuses on developing management skills for the nonprofit area through readings, case materials and structured activities. Students examine the context, issues and skills associated with leadership and management in nonprofit organizations and apply them to challenges and opportunities that confront administration of nonprofits.

**Requisites:** Declared in Social Work MSW, or Public Affairs MPA

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**SOC WORK 890 – THESIS-RESEARCH**

1-6 credits.

Research and thesis for MSW students who wish to submit a master's thesis or conduct independent research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021

**SOC WORK 920 – CHILD, YOUTH, AND FAMILY POLICIES AND SERVICES**

2 credits.

Considers legislation, policies, and institutional structures that affect children, youth, and families across multiple service systems.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK 921 – CHILD WELFARE**

2-3 credits.

Implications of knowledge from the social and behavioral sciences and public welfare policy on child welfare problems and services.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 923 – FAMILY VIOLENCE**

2 credits.

An overview of the risk factors and trauma effects of the major forms of family violence. Models of prevention and intervention will be described. Attitudes about family violence will be explored. Basic skills for detecting abuse and making referrals will be taught.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC WORK 924 – FAMILY PROBLEMS AND SOCIAL WORK**

2-3 credits.

Review of family theory and its relevance for social work practice; an analysis of family subsystems in the U.S.; current research on the American family.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**SOC WORK 929 – SOCIAL WORK AND SUBSTANCE USE DISORDERS**

2 credits.

History, current understanding, assessment, and treatment of problematic substance abuse. Provides knowledge and social work skills to conceptualize, screen, assess, and treat substance use disorders and co-occurring disorders (i.e., mental illness and substance use disorders). A biopsychosocial perspective is emphasized.

**Requisites:** Declared in Social Work MSW

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC WORK/ED PSYCH 945 – EVALUATION RESEARCH**

3 credits.

A comprehensive introduction to practice of program evaluation research in social welfare and human development. Developments in descriptive, experimental, quasi-experimental, theory-driven, and naturalistic evaluations detailed. Topics include assessment, evaluation design, monitoring, outcome evaluation, selection bias, program theory, meta-analysis and utilization.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SOC WORK 946 – FACULTY RESEARCH SEMINAR**

1 credit.

Further the socialization of students to the Ph.D. program. Provides opportunities for faculty to discuss research interests and doctoral education.

**Requisites:** Declared in Social Welfare graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SOC WORK 947 – STUDENT RESEARCH SEMINAR**

1 credit.

Provides a forum to discuss experiences, success strategies and research interests; receive feedback on research and later, on colloquia they prepare for job searches.

**Requisites:** Declared in Social Welfare graduate program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 948 – PROSEMINAR**

1-3 credits.

Quantitative research methods seminars for research in the social and behavioral sciences.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SOC WORK 949 – PROSEMINAR**

1-3 credits.

Qualitative research methods seminars for research in the social and behavioral sciences.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SOC WORK 950 – PHD PROSEMINAR**

1-3 credits.

Social policy seminars. Contemporary social welfare policy concerns are addressed utilizing a policy analytics framework. Poverty and Income Support Policy; Family Theory Policy; Child Development and Policy; and Social Determinants of Health and Policy are examples of topics offered.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SOC WORK 951 – PHD PROSEMINAR**

1-3 credits.

Applied theory seminars. Provide a model of the application of social theory to social problems. Adult Mental Health; Microeconomic Theory Applied to Social Problems; and Child Welfare are examples of topics offered.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 952 – PHD PROSEMINAR**

3 credits.

Application of research methods seminars. Practical experience and application of research knowledge and skills. Applied data analysis, proposal and grant Writing, and research methods in communities of color are examples of topics addressed.

**Requisites:** Graduate Students Only

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 990 – THESIS-RESEARCH**

2-3 credits.

Dissertation preparation.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC WORK 999 – INDEPENDENT READING**

1-9 credits.

Focused work on a topic or problem of graduate student interest under supervision of social work instructors.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## SOCIOLOGY (SOC)

**SOC 120 – MARRIAGE AND FAMILY**

3-4 credits.

Sociology of the family. Demographic, social-psychological, economic, and historical aspects. Union formation and dissolution. Childbearing and childrearing. Social stratification and the family. Intergenerational support. Social consequences of family behaviors.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 125 – AMERICAN SOCIETY: HOW IT REALLY WORKS**

3–4 credits.

Explanation of US performance in realizing the values of freedom, fairness, and democracy. Topics include markets, capitalism, democracy, capitalist democracy; class, race, and gender inequalities; militarism and US international role; and US electoral politics, media, and social mobilization.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 130 – SOCIAL PROBLEMS**

3 credits.

Conditions and processes in personal and social maladjustment; nature of social disorganization and social problems; their relation to social change and basic ideological, technological, and institutional structures and processes.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**SOC/LEGAL ST 131 – CRIMINAL JUSTICE IN AMERICA**

3–4 credits.

Day-to-day functioning of the elements of the criminal justice system in the U.S. Nature of crime in the U.S., ideas about causes and solutions. Emphasis on the sociology of the components of criminal justice system--organization and roles of police, lawyers, court and correctional personnel.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 134 – SOCIOLOGY OF RACE & ETHNICITY IN THE UNITED STATES**

3–4 credits.

The nature of inter-group relations; emphasis on various forms of racism, discrimination, and white privilege; historical background and characteristics of American Indians, African Americans, Hispanic Americans, Asian Americans and other racial and ethnic minorities; a consideration of economic, housing, political, legal, educational, familial, and health challenges faced by minority groups in US society.

**Requisites:** None**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 138 – THE SOCIOLOGY OF GENDER**

3–4 credits.

A sociological examination of the status and roles of women and men in society, including the experiences of marriage, parenthood, employment and occupational attainment, socialization into sex roles and cultural reinforcement of these. Attention will be given to both existing patterns and change in those patterns.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/C&E SOC 140 – INTRODUCTION TO COMMUNITY AND ENVIRONMENTAL SOCIOLOGY**

4 credits.

Sociological examination of the linkages between the social and biophysical dimensions of the environment. Key topics include community organizing, local food systems, energy transitions, environmental justice, resource dependence, and sustainable development.

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/PSYCH 160 – HUMAN SEXUALITY: SOCIAL AND PSYCHOLOGICAL ISSUES**

3–4 credits.

Biological, psychological and sociological aspects of sexual relationships and behavior. Presents theoretical and empirical materials on sexuality throughout the life-course, including childhood, adolescence, adulthood, and later life. Attention is given to gender, religion, education and the law as they relate to sexual expression in society.

**Requisites:** Not open to students with credit for PSYCH/SOC/PSYCH 453 (or PSYCH/SOC 350 prior to spring 2018)**Course Designation:** Breadth – Social Science

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**SOC 170 – POPULATION PROBLEMS**

3-4 credits.

Social, economic, and political problems affected by birth and death rates, population size and distribution, voluntary and forced migration. World ecology, limits to growth, economic development, international conflict, environmental quality, metropolitan expansion, segregation by age, race, and wealth. Policies affecting reproduction, nuptiality, morbidity, mortality, migration.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 181 – HONORS INTRODUCTORY SEMINAR-THE SOCIOLOGICAL ENTERPRISE**

3-4 credits.

An introduction to the paradigms, methods and substance of sociology.

**Requisites:** Declared in an Honors program and satisfied Communications A requirement. Not open to students with credit for SOC/C&E SOC/ SOC 210 or 211.

**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 198 – DIRECTED STUDY**

1-3 credits.

Program of study devised by a student in collaboration with a faculty member. Open only to freshmen and sophomores.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2014**SOC 199 – DIRECTED STUDY**

1-3 credits.

Program of study devised by a student in collaboration with a faculty member. Open only to Freshmen and sophomores.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**SOC/GEN&WS 200 – INTRODUCTION TO LESBIAN, GAY, BISEXUAL, TRANSGENDER AND QUEER+ STUDIES**

3-4 credits.

A multidisciplinary introduction to lesbian, gay, bisexual, transgender, and queer+ (LGBTQ+) studies, including theories of identity formation, different societal interaction with LGBTQ+ communities, LGBTQ+ cultures in history, and contemporary legal and political issues. Course materials explore the intersections between LGBTQ+ identities and other socially marginalized identities, including (but not limited to) those based on race, ethnicity, religion and disability.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Either Humanities or Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 205 – INTERCULTURAL DIALOGUES**

3 credits.

Promotes diversity by bringing students of different backgrounds together for discussion, projects, and gatherings. Gain intergroup and critical thinking skills to promote diversity and equity in classroom and professional settings. Introduces sociological analysis of race, ethnicity, and other intersecting categories.

**Requisites:** Consent of instructor**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 206 – LEADERSHIP IN INTERCULTURAL DIALOGUES**

3 credits.

Gain skills for designing and facilitating effective dialogue on topics pertaining to race, ethnicity, and other categories of social difference as a facilitator and/or apprentice for SOC 205. Completion of SOC 205 required.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SOC/C&E SOC 210 – SURVEY OF SOCIOLOGY**

3-4 credits.

Introduction to the field of American sociology, its subfields and specialized areas of research, theoretical traditions and research methods.

**Requisites:** Satisfied Communications A requirement. Not open to students with credit for SOC 181 or SOC/C&E SOC/SOC 211

**Course Designation:** Gen Ed - Communication Part B

Breadth - Social Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**SOC/C&E SOC 211 – THE SOCIOLOGICAL ENTERPRISE**

3 credits.

Basic principles and definitions of sociology. Readings and discussion of the perspectives of sociology, the individual and society, groups and social process, stratification, organizations and power, demography, and social change.

**Requisites:** Not open to students with credit for SOC 181 or SOC/C&E SOC/SOC 210

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/ASIAN AM 220 – ETHNIC MOVEMENTS IN THE UNITED STATES**

3–4 credits.

Sociological analysis of historical and recent ethnic/racial conflict and movements in the U.S., including the relations between European Americans, African Americans, Mexican Americans, Native Americans, and Asian Americans, with additional material on other groups and relations.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 222 – FOOD, CULTURE, AND SOCIETY**

3 credits.

Social and cultural dimensions of food production and consumption. Uses historical and cross-cultural analytical frameworks. Treats a wide variety of topics including indigenous, racial, and ethnic foodways, industrialized food systems, sustainable agriculture, movements for food justice.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 225 – CONTEMPORARY CHINESE SOCIETY**

3 credits.

Basic social science "literacy" of contemporary China: introduction on the main institutions of traditional Chinese society; and the social changes in various aspects of contemporary Chinese society since 1949, including the economy, family, education, social stratification, politics, legal reform, and the urban/rural divide.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**SOC 236 – BASCOM COURSE**

3 credits.

Developing skills in critical reading, logical thinking, use of evidence, and use of library resources. Emphasis on writing in the conventions of specific fields.

**Requisites:** Satisfied Communications A requirement

**Course Designation:** Gen Ed – Communication Part B

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**SOC/ASIAN/GEOG/HISTORY/POLI SCI 244 – INTRODUCTION TO SOUTHEAST ASIA: VIETNAM TO THE PHILIPPINES**

4 credits.

As an introduction to Southeast Asia, covers the ethnic, cultural, religious, and political histories of the region from the classical states period to the present, with an emphasis on colonialism, nationalism, decolonization, and the emergence of modern political and social systems into the 21st century, including an exposure to region's contemporary literature. Not open to students who completed LCA 244 prior to Fall 2019.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/C&E SOC 245 – TECHNOLOGY AND SOCIETY**

3 credits.

Covers technology, the social forces shaping its development, and social impacts of its adoption. Examine one's assumptions about technology and its relationship to society.

**Requisites:** None

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**SOC/C&E SOC/F&W ECOL 248 – ENVIRONMENT, NATURAL RESOURCES, AND SOCIETY**

3 credits.

Introduces the concerns and principles of sociology through examination of human interaction with the natural environment. Places environmental issues such as resource depletion, population growth, food production, environmental regulation, and sustainability in national and global perspectives.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**SOC/C&E SOC/HISTORY/POLI SCI 259 – FORWARD? THE WISCONSIN IDEA, PAST AND PRESENT**

1-3 credits.

Engage in ongoing reflection and dialogue on the Wisconsin Idea and how it informs the mission of the University of Wisconsin. Consider the Wisconsin Idea as it has developed since its beginnings, with a focus on what it means today and what it can mean in the future.

**Requisites:** Junior or senior standing only

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2020

**SOC/AFROAMER/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/POLI SCI/SPANISH 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None

**Course Designation:** Breadth – Social Science

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/AFRICAN/AFROAMER/ANTHRO/GEOG/HISTORY/POLI SCI 277 – AFRICA: AN INTRODUCTORY SURVEY**

4 credits.

African society and culture, polity and economy in multidisciplinary perspectives from prehistory and ancient kingdoms through the colonial period to contemporary developments, including modern nationalism, economic development and changing social structure.

**Requisites:** None

**Course Designation:** Breadth – Either Humanities or Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 320 – RESEARCH PRACTICUM IN SOCIOLOGY**

1-3 credits.

Practical experience in techniques of social research through work on a research project for the semester.

**Requisites:** CE SOC/SOC/C&E SOC 357

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC/A A E/C&E SOC 340 – ISSUES IN FOOD SYSTEMS**

3-4 credits.

With primary emphasis on the U.S., the course covers social, economic and biological dimensions of food systems. Using classroom and community experience, the course combines academic approaches with practitioner knowledge. A community project is required.

**Requisites:** SOC/C&E SOC 140, CE SOC/SOC 181, 210, or 211

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/C&E SOC 341 – LABOR IN GLOBAL FOOD SYSTEMS**

3 credits.

Overview of our current food system and how new technologies and globalization are reshaping it, focusing especially on the implications for workers throughout the food chain. Learn about the ways that social movements are working to reshape commodity chains by promoting local production, fair trade, and labor justice.

**Requisites:** 3 credits in CE SOC or SOC

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/C&E SOC 343 – SOCIOLOGY OF HEALTH AND MEDICINE**

3 credits.

Social, cultural, and structural factors in shaping definitions of health and illness, distribution of disparate health outcomes, and the organization of health professions and healthcare.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC 351 – INTRODUCTION TO SURVEY METHODS FOR SOCIAL RESEARCH**

3-4 credits.

Introduction to principles and basic techniques in surveys for social research. Specific topics include the basic concepts of sampling and survey measurement. Learn how survey researchers apply the methods presented and practice applying the concepts and methods learned. The techniques used in this class are relevant for many kinds of data collection and standardized measurement. Provides a substantial experience with practical research skills that are relevant in many academic and private sector contexts.

**Requisites:** Sophomore standing and (SOC/C&E SOC/SOC 357, 360, STAT 301, 371, ECON 310, PSYCH 210, GEOG 360, or STAT/MATH/STAT 310)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 357 – METHODS OF SOCIOLOGICAL INQUIRY**

3-4 credits.

Scientific methods in the study of society; procedures for testing sociological theory: problem definition, hypothesis construction, collection and evaluation of data. Practical experience conducting small research projects.

**Requisites:** Sophomore standing or (SOC 181, CE SOC/SOC/ C&E SOC 140, 210, or 211)

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 360 – STATISTICS FOR SOCIOLOGISTS I**

4 credits.

Presentation of sociological data; descriptive statistics; probability theory and statistical inference; estimation and tests of hypotheses; regression and correlation and the analysis of contingency tables.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement

**Course Designation:** Gen Ed - Quantitative Reasoning Part B Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 361 – STATISTICS FOR SOCIOLOGISTS II**

4 credits.

Applied linear regression modeling for social scientists. Bivariate and multiple regression, dummy variables, interactions, nonlinear relationships, indirect effects and omitted variable bias, outliers, heteroskedasticity, and multicollinearity; associated diagnostics and corrections. Use of Stata and/or SAS for dataset creation and analysis.

**Requisites:** SOC/C&E SOC/SOC 360, ECON 310, PSYCH 210, GEOG 360, STAT/MATH/STAT 310, STAT 301, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC 362 – STATISTICS FOR SOCIOLOGISTS III**

4 credits.

Generalized linear models with selected applications to social science data. Topics: Review of multiple regression; properties of estimators; general linear restrictions; instrumental variables; two-stage least squares; panel data; fixed and random effects; logit, probit, and related models.

**Requisites:** SOC/C&E SOC/SOC 361, STAT 302, ECON 400, 410, STAT/MATH/STAT 309, or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 365 – DATA MANAGEMENT FOR SOCIAL SCIENCE RESEARCH**

3-4 credits.

Understanding the structure of different types of social scientific data, techniques for data evaluation, cleaning, documentation and visual display, merging data from multiple sources, restructuring data for analysis.

**Requisites:** SOC/C&E SOC/SOC 360, PSYCH 210, STAT 301, ECON 310, STAT/MATH/STAT 310, or GEOG 360

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 375 – INTRODUCTION TO MATHEMATICAL SOCIOLOGY**

3 credits.

Explores mathematical models of social structure, focusing especially on social network analysis and related methods. Makes extensive use of matrix algebra and mathematical software.

**Requisites:** SOC/C&E SOC/SOC 360, PSYCH 210, STAT 301, ECON 310, STAT/MATH/STAT 310, or GEOG 360

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SOC 376 – MATHEMATICAL MODELS OF SOCIAL SYSTEMS**

3 credits.

Explores mathematical models of social process employing dynamical systems, Markov chains, and simulation analysis. Examples will address a wide range of sociological topics including cultural evolution, demography, social influence, social-network formation, religion, residential segregation, and social movements.

**Requisites:** Junior standing and (SOC 375, MATH 320, 340, 341, or 375)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SOC/LEGAL ST 415 – THE LEGAL PROFESSION**

3-4 credits.

History, structure, and functioning of legal professions in the United States and in other countries around the world.

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**SOC 421 – PROCESSES OF DEVIANT BEHAVIOR**

3-4 credits.

Factors and conditions that underlie disagreement about fundamental values which inform views and conceptualizations of deviance; their relation to personal and social maladjustment; deviant behavior across different social contexts.

**Requisites:** Junior standing or (LEGAL ST/SOC/LEGAL ST 131, SOC 181, SOC/C&E SOC/SOC 210, or 211)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/SOC WORK 422 – SOCIAL ISSUES IN AGING**

3 credits.

Origins, nature, scope and dynamics of the social problems of older adults and their families in the U.S. and to acquaint students with programs and services available to older adults.

**Requisites:** Sophomore standing and (SOC WORK 205, SOC 181, CE SOC/SOC/C&E SOC 140, 210 or 211)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/ILS/JEWISH 423 – MODERN JEWISH THOUGHT**

3 credits.

How do Jews fit into the modern world? While the "Jewish Question" initially referred to debates about Jewish emancipation (the struggle for equal citizenship and social integration that started with the French Revolution), it later served to describe modern Jewish political and social thought about the identity, place, and role of the Jews in the modern world. Beginning in the late 19th century, as cultural assimilation, economic impoverishment in eastern Europe, and rising antisemitism sowed doubts about the viability of emancipation and traditionalism alike, Jewish thinkers proposed new answers to the Jewish question. Learn about some of the major answers they debated, including revolutionary universalistic utopias (socialism and Communism), various forms of Jewish nationalism, hyphenated identities, cultural pluralism, and cosmopolitanism. Work to contextualize these ideas historically while also considering whether and how they remain relevant to the present.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/GEN&WS/LEGAL ST 425 – CRIME, GENDER AND JUSTICE**

3 credits.

Focuses on the intersection between gender, crime and justice from a cross-cultural perspective. The gendered nature of the criminal justice system, female experiences of crime, prosecution and incarceration as well as the extent to which women are victims, offenders, and participants in the criminal justice system will be explored. Special emphasis will be placed on the theoretical implications of offending behavior and the intersection of gender with sexuality, race, ethnicity and class. The goal of this course is to provide a foundation for critically assessing the often controversial issues surrounding race, gender, crime, and criminal justice in society.

**Requisites:** LEGAL ST/SOC/LEGAL ST 131, GENSW 101, 102, 103 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/CHICLA/LEGAL ST 440 – ETHNICITY, RACE, AND JUSTICE**

3-4 credits.

An examination of ethnicity, race, and justice, with a specific emphasis on US Latinos, the largest minority group in the United States.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC 441 – CRIMINOLOGY**

3-4 credits.

Theoretical explanations of criminal behavior. Measurement of crime and evaluation of criminological research. Current issues in criminology and crime-related public policy.

**Requisites:** Junior standing or (LEGAL ST/SOC/LEGAL ST 131, SOC 181, SOC/C&E SOC/SOC 210, or 211)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/CHICLA/LEGAL ST 443 – IMMIGRATION, CRIME, AND ENFORCEMENT**

3-4 credits.

A study of immigration, crime, and border enforcement, engaging both historical and present-day debates, focusing on Latino immigration and the U.S.-Mexico border.

**Requisites:** SOC/C&E SOC/SOC 140, 210, 211, SOC 181, CHICLA/ASIAN AM/FOLKLORE/AFROAMER/AMER IND/ASIAN AM/CHICLA 102, CHICLA 201, CHICLA 210, CHICLA 230, CHICLA/POLI SCI/CHICLA 231, CHICLA/GENWS/HISTORY/CHICLA/GEN&WS 245, SOC/LEGAL ST/SOC 131, or LEGAL ST/POLI SCI/LEGAL ST 217

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 444 – SOCIAL PSYCHOLOGY: A SOCIOLOGICAL PERSPECTIVE**

3-4 credits.

The systematic study of the individual in a social context, including social interaction, motivation, attitudes, conformity, communication, leadership, personal relationships, and behavior in small groups.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 446 – JUVENILE DELINQUENCY**

3-4 credits.

Concepts of childhood and delinquency. Measurement of delinquent behavior. Application of competing theories to relationships within the family, school, and peer group. Evaluation of programs for treatment, prevention, and control. The rise of the juvenile system.

**Requisites:** Junior standing or (LEGAL ST/SOC/LEGAL ST 131, SOC 181, SOC/C&E SOC/SOC 210, or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/PSYCH 453 – HUMAN SEXUALITY**

4 credits.

Provides an interdisciplinary introduction to biological, psychological, and sociological aspects of human sexuality.

**Requisites:** PSYCH 202 or Sophomore standing. Not open to student with credit for PSYCH/SOC/PSYCH 160

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SOC 460 – STUDY ABROAD IN DEMOGRAPHY AND ECOLOGY**

1-6 credits.

Provides a sociology area equivalency for demography and ecology courses taken in study abroad programs that do not equate exactly to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SOC 461 – STUDY ABROAD IN ADDITIONAL METHODS AND STATISTICS**

1-6 credits.

Provides a sociology area equivalency for additional methods and statistics courses taken in study abroad programs that do not equate exactly to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SOC 462 – STUDY ABROAD IN ADDITIONAL THEORY**

1-6 credits.

Provides a sociology area equivalency for additional theory courses taken in study abroad programs that do not equate exactly to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SOC 463 – STUDY ABROAD IN DEVIANT BEHAVIOR**

1-6 credits.

Provides a sociology area equivalency for deviant behavior courses taken in study abroad programs that do not equate to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SOC 464 – STUDY ABROAD IN SOCIAL PSYCHOLOGY**

1-6 credits.

Provides a sociology area equivalency for social psychology courses taken in study abroad programs that do not equate exactly to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SOC 465 – STUDY ABROAD IN SOCIAL ORGANIZATION**

1-6 credits.

Provides a sociology area equivalency for social organization courses taken in study abroad programs that do not equate exactly to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**SOC/CHICLA 470 – SOCIODEMOGRAPHIC ANALYSIS OF MEXICAN MIGRATION**

3 credits.

Introduces students to social and demographic analysis and explanations of the historical and present day causes and consequences of migration of the largest immigrant group to the United States in the 20th century.

**Requisites:** SOC 134, 170, 181, ASIAN AM/SOC/ASIAN AM 220, CE SOC/SOC/C&E SOC 140, 210, 211, CHICLA 201, CHICLA 210, or CHICLA/POLI SCI/CHICLA 231; or graduate/professional standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**SOC/C&E SOC 475 – CLASSICAL SOCIOLOGICAL THEORY**

3 credits.

Classical theory; Marx, Durkheim, Weber, and other important classical theorists and schools of thought.

**Requisites:** Sophomore standing or (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC 476 – CONTEMPORARY SOCIOLOGICAL THEORY**

3 credits.

Norm and norm emergence, Preference formation, Ideology, Bounded Rationality, Rational Choice, Prospect Theory, Framing processes, Models of Collective Behaviors, Symbolic Interactionism, Communicative Action, Game Theory, Processes of Social Influence.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC 496 – TOPICS IN SOCIOLOGY**

1-3 credits.

Intensive study of selected topics in sociology.

**Requisites:** Junior standing or (SOC 181, SOC/C&E SOC/SOC 210, or 211)

**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC 497 – STUDY ABROAD IN SOCIOLOGY**

1-6 credits.

Provides a sociology area equivalency for courses taken in study abroad programs that do not equate to existing sociology courses. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2001**SOC/C&E SOC 532 – HEALTH CARE ISSUES FOR INDIVIDUALS, FAMILIES AND SOCIETY**

3 credits.

Issues related to health and health care delivery in our society. Topics include social, cultural and ethical influences on consumer definitions of health and use of medical care, and on the health care system's responses.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**SOC/C&E SOC 533 – PUBLIC HEALTH IN RURAL & URBAN COMMUNITIES**

3 credits.

Sociological approaches to community, rural, and public health. Examines epidemiological evidence for and policy solutions to health issues that impact vulnerable populations in diverse geographic and social settings. Topics include mental health, environmental and occupational health, preventive care, substance abuse.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SOC 535 – TALK AND SOCIAL INTERACTION**

3 credits.

Focus on the systematic observation and analysis of face-to-face interaction. Sociological approaches to naturally occurring interaction--i.e., human talk and behavior that has been observed, audiorecorded, or videorecorded--will be explored. The approaches include ethnomethodology, conversational analysis, and Goffmanian sociology.

**Requisites:** Junior standing or (SOC 181, SOC/C&E SOC/SOC 210, or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/C&E SOC/ENVIR ST 540 – SOCIOLOGY OF INTERNATIONAL DEVELOPMENT, ENVIRONMENT, AND SUSTAINABILITY**

3 credits.

Sociological analysis of relationships among economic growth, environmental sustainability and social justice in the developing world. Considers frameworks for understanding poverty, hunger, educational and technological inequality, and the impact of globalization on prospects for socially and ecologically sustainable development.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211

**Course Designation:** Breadth - Social Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 541 – ENVIRONMENTAL STEWARDSHIP AND SOCIAL JUSTICE**

3 credits.

Application of sociological theory and analysis to environmental issues. Examines the ways in which environmental stewardship and conflict are embedded within broader cultural, social, and political contexts.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, 211, SOC/CE SOC/F&W ECOL/C&E SOC/SOC 248, ENVIR ST 112, 113, ENVIR ST/ GEOG/ENVIR ST 139, 337, 339, GEOG 101, or graduate/professional standing

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC 543 – COLLECTIVE BEHAVIOR**

3 credits.

Emergence of various forms of collective behavior from social interactions, collective action problem, game theory, prospect theory, social networks, network effects, information cascade, increasing returns, social influence, epidemics, social movements, mass media.

**Requisites:** Junior standing or (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SOC 550 – COMPARATIVE RACIAL INEQUALITY**

3 credits.

An introduction to the sociological study of racial orders in comparative and historical perspective. As W.E.B. Du Bois famously wrote, "The problem of the twentieth century is the problem of the color line," but as he also insisted, the social meaning of race is shaped by specific historical and economic contexts. Half of the content focuses on the American experience, especially over the last 50 years, exploring historical and contemporary meanings of race in America, and how racial dynamics have changed (and not changed) across time. The other half continues to explore the American experience, but now using a comparative historical approach, discussing patterns of racial inequality and social change in South Africa and Brazil, both to understand how these issues have played out in those contexts, and to gain new insights into our experiences in the United States.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**SOC/C&E SOC 573 – COMMUNITY ORGANIZATION AND CHANGE**

3 credits.

Examines theories of community change and different models of community organizing.

**Requisites:** Junior standing or (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211)

**Course Designation:** Breadth - Social Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021



### **SOC 575 – SOCIOLOGICAL PERSPECTIVES ON THE LIFE COURSE AND AGING**

3 credits.

Age as a basis of societal differentiation in modern and premodern societies; social psychological, demographic, sociobiological, socioeconomic, and sociohistorical views of age-graded events and behaviors; examination of the life course and aging as sociological variables.

**Requisites:** Junior standing or CE SOC/SOC/C&E SOC 357

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

### **SOC/AMER IND/C&E SOC 578 – POVERTY AND PLACE**

3 credits.

The allocation of economic and social rewards in the United States; emphasis on persistently poor regions and communities; analysis of selected minority groups and their poverty statuses; poverty programs and their consequences for structural and cultural changes.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, or SOC 181

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **SOC/GEN&WS 611 – GENDER, SCIENCE AND TECHNOLOGY**

3 credits.

Examination of issues and theories in gender and science. Topics include historical and contemporary studies of technoscientific and medical constructions of sex/gender differences; feminist studies of science, technology, and medicine; proposals of new epistemologies.

**Requisites:** Junior standing and SOC/C&E SOC 475, GEN&WS 441, GEN&WS 445, or SOC/GENWS 477 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **SOC/C&E SOC/URB R PL 617 – COMMUNITY DEVELOPMENT**

3 credits.

Social, cultural and personality factors influencing community development, with reference to developing countries as well as contemporary rural communities; consideration of theoretical and operational issues.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **SOC/C&E SOC 618 – SOCIAL NETWORK ANALYSIS**

3 credits.

Social network analysis is a social scientific approach examining individuals as embedded in networks of social relations. Covers the fundamentals of network thinking, network tools, and the analysis and presentation of social network data. Direct practice with network data using software R.

**Requisites:** Junior standing and (SOC/C&E SOC/SOC 360, STAT 301, STAT 371, ECON 310, PSYCH 210, GEOG 360, MATH/STAT/MATH 310, or GEN BUS 303)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

### **SOC 621 – CLASS, STATE AND IDEOLOGY: AN INTRODUCTION TO MARXIST SOCIAL SCIENCE**

3 credits.

Core theoretical problems and themes of contemporary Marxist social science, focusing on the theory of history, classes, the state and ideology.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### **SOC 624 – POLITICAL SOCIOLOGY**

3 credits.

Theory of democracy, political culture, comparative studies of voting behavior, political decisions, collective violence, regime breakdowns, social movements, mobilization processes, frame analysis.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOC 626 – SOCIAL MOVEMENTS**

3 credits.

Role of social structure, authorities and movement participants, and leadership in the origins, mobilization, participation, strategy and tactics, and potential for success of social movements.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SOC/C&E SOC 630 – SOCIOLOGY OF DEVELOPING SOCIETIES/THIRD WORLD**

3 credits.

Review of problems and prospects of so-called "developing societies." Includes theory of economic/social development, political economic organizations of "developing" societies, history of colonialism/imperialism, attempts to industrialize and results of those attempts.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC 632 – SOCIOLOGY OF ORGANIZATIONS**

3–4 credits.

Sociological perspectives on the structures and processes of large-scale formal organizations in Western society; a wide ranging examination of contemporary organizational theory and research, with illustrations from business, governmental, military, political and educational organizations.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC 633 – SOCIAL STRATIFICATION**

3 credits.

Classical and contemporary theories of the nature of social inequality; recent patterns and trends in inequality in the US; analysis of inequalities based on class, race, gender; the relationship of inequality to globalization, immigration, and politics.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021**SOC 640 – SOCIOLOGY OF THE FAMILY**

3 credits.

Examines family life from a sociological perspective, drawing on insights from demography, economics, history and anthropology. Considers theories and empirical evidence about families as social institutions; patterns of family change; and families and inequality.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/LAW/LEGAL ST 641 – SOCIOLOGY OF LAW**

3–4 credits.

Theory and research on the social origins, processes and effects of law; examination of law-related behavior, legal institutions, law and social structure, and law and social change; linkage to contemporary theoretical and political debates.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/C&E SOC/URB R PL 645 – MODERN AMERICAN COMMUNITIES**

3 credits.

Relevance of the concept of community to American society. Review of several basic theories of community and analysis of the nature of community in the broader political and economic context.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**SOC 646 – RACE AND ETHNIC RELATIONS**

3 credits.

Institutional, ecological, demographic, and social psychological aspects in the United States and elsewhere; historical and contemporary coverage.

**Requisites:** Junior standing**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**SOC 647 – SOCIOLOGY OF SPORT**

3 credits.

Sport as a social institution; social characteristics and problems of sport at the youth, school, college, and professional levels.

**Requisites:** Junior standing or (SOC 181, SOC/C&E SOC/SOC 210, or 211)**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2020

**SOC/ED POL 648 – SOCIOLOGY OF EDUCATION**

3 credits.

Utilizes a sociological lens to examine American schools and schooling, with a particular focus on social inequality in the U.S. and how class, race, and gender intersect in the experiences of students. Examine how schools and schooling relate to broader social structures, institutions, and practices with a focus on inequality in public education.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/C&E SOC 650 – SOCIOLOGY OF AGRICULTURE**

3 credits.

Introduction to sociology of agriculture in advanced industrial-capitalist societies, including theoretical, historical, and empirical issues of agriculture in the United States.

**Requisites:** SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**SOC/C&E SOC 652 – SOCIOLOGY OF ECONOMIC INSTITUTIONS**

3 credits.

Sociological perspectives on the organization of the firm, financial markets, and work, intermediate associations (unions, ethnic economies), the state, and the international economy. Contrast between neoclassical, traditional institutionalist, post-fordist, and neo-fordist perspectives on the nature and evolution of these institutions.

**Requisites:** Junior standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**SOC/ECON 663 – POPULATION AND SOCIETY**

3 credits.

Social and economic determinants and consequences of contemporary and historical population trends in both developed and developing societies. Fertility, mortality, migration, population distribution, age structure, population growth.

**Requisites:** SOC 170, SOC/CE 357, SOC/POP HLTH 380, ECON 101, 111, or A A E 215; or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**SOC/HISTORY 670 – CAPITALISM, SOCIALISM, AND DEMOCRACY IN AMERICA SINCE 1890**

3-4 credits.

Political institutional arrangements which have emerged since 1890 and how they have influenced social and economic policies implemented since the Second World War. Why the working class has been politically weak in America; policy consequences of this weakness.

**Requisites:** Junior standing and (SOC 181, CE SOC/SOC/C&E SOC 140, 210, 211, HISTORY 102 or 109), or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2019**SOC 674 – DEMOGRAPHIC TECHNIQUES I**

3 credits.

Methods of measurement for enumeration and registration data; construction of life tables; measures of fertility, nuptiality and migration; examination of census variables.

**Requisites:** CE SOC/SOC/C&E SOC 357, 360, STAT 301, 371, ECON 310, PSYCH 210, GEOG 360, STAT/MATH/STAT 310, or graduate/professional standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOC/C&E SOC 676 – APPLIED DEMOGRAPHY: PLANNING AND POLICY**

3 credits.

Introduction to demographic concepts, methods, data, and trends for application in business, government, planning and other applied areas. Emphasis on U.S. census data and their uses.

**Requisites:** (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211) and CE SOC/SOC/C&E SOC 357**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2017**SOC 678 – SOCIOLOGY OF PERSECUTION**

3 credits.

Persecution as an object of sociological investigation with special focus on the perpetrators' motivations, the machinery of persecution policies, the behaviors of state agents, and the attitudes and strategies displayed by the potential victims.

**Requisites:** Junior standing and (SOC 181, CE SOC/SOC/C&E SOC 140, 210, or 211), or graduate/professional standing**Course Designation:** Breadth – Social Science

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015

**SOC 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual research and study for students completing Honors in the Major.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 691 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SOC 692 – SENIOR THESIS**

2-3 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**SOC/C&E SOC 693 – PRACTICUM IN ANALYSIS AND RESEARCH**

3 credits.

Practical experience in techniques of social research through assignment to a research project for the semester. Focuses on the art and practice of research and the writing of research reports.

**Requisites:** CE SOC/SOC/C&E SOC 357, 361 and declared in Sociology: Concentration in Analysis and Research

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/LEGAL ST 694 – CRIMINAL JUSTICE FIELD OBSERVATION**

2-3 credits.

Field placements and seminar sessions to develop sociological understanding of criminal justice processes. Placement in criminal justice agencies and lectures and discussions applying concepts and theories to field experience.

**Requisites:** Declared in Criminal Justice certificate and SOC/LEGAL ST/ SOC 131

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC 698 – DIRECTED STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**SOC 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC 700 – INTRODUCTORY PROSEMINAR FOR GRADUATE STUDENTS**

1 credit.

An introduction to current issues in sociology and its subfields.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/C&E SOC/ISY E/NE 708 – SOCIETAL RISK MANAGEMENT OF TECHNOLOGICAL HAZARDS**

3 credits.

Issues involved in decision-making regarding technological risks and risk management in areas such as nuclear power, hazardous waste disposal, and pollution control. Risk perception and cognitive biases; risk analysis and decision analysis; political issues in risk management; regulatory mechanisms; and risk communication. Selected case studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**SOC/ENGL 710 – INTERACTION ANALYSIS: TALK AS SOCIAL ORGANIZATION**

3 credits.

The study spoken English as a site for social organization. Theoretical foundations and methodological practices for conversation analysis will be explored using videotaped data from English. Content includes current critical trends in analyzing interaction as well as cross-cultural and cross-linguistic perspectives.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**SOC/C&E SOC 724 – INTERMEDIATE POLITICAL SOCIOLOGY**

3 credits.

Critical examination of theories and research in political sociology. Topics include: power and interests, state-formation, social movements, class and political behavior, revolutions, ideology, and states and social policy.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2013

**SOC/C&E SOC 730 – INTERMEDIATE SOCIAL PSYCHOLOGY: THE INDIVIDUAL AND SOCIETY**

3 credits.

Major social psychological theories and research that focus on the individual in social context. Topics include: perspectives on socialization, the self, social perception and attribution, attitudes, language and nonverbal communication, and attraction and relationships.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 731 – INTERMEDIATE SOCIAL PSYCHOLOGY: GROUP AND COLLECTIVE PROCESSES**

3 credits.

Major social psychological theories and research that focus on interpersonal relations and group processes. Topics include: social interaction (influence, self-presentation, altruism, aggression), groups (cohesion, conformity, leadership, problem-solving, decision making), intergroup relations (conflict, stereotypes), n-person games (dilemmas, coalition formation).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**SOC 735 – ETHNOMETHODOLOGY & CONVERSATION ANALYSIS**

3 credits.

Analysis of everyday, local practices for assembling coherent and stable social environments. The focus on everyday practices derives from both ethnomethodological and conversation analytic literatures and investigations. Instruction will involve both didactic or illustrative presentations and hands-on work with interactional data from a variety of social settings, whether informal telephone calls, or more formal work or organizational settings.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SOC/C&E SOC 750 – RESEARCH METHODS IN SOCIOLOGY**

3 credits.

Application of scientific methods to the analysis of social phenomena; methodological orientations in sociology; types of research procedure: nature of sociological variables.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC 751 – SURVEY METHODS FOR SOCIAL RESEARCH**

3 credits.

Theoretical and practical issues involved in the design of surveys and their components. Apply knowledge of survey research techniques to a specific and complete research project.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SOC 752 – MEASUREMENT AND QUESTIONNAIRES FOR SURVEY RESEARCH**

3 credits.

Analysis and presentation of survey results through contingency table analysis. Techniques for assessing the quality of data produced by survey methods. Practical application of material to a specific research problem through research reports and other exercises involving data analysis.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SOC 753 – COMPARATIVE AND HISTORICAL METHODS IN SOCIOLOGY**

3 credits.

Comparative strategies and historical methods through methodological readings, exercises, and evaluations of exemplary analyses in which investigators of organizational structures, institutional relationships, political conflicts, and cultural patterns bring theory and historical-comparative evidence to bear on one another.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SOC 754 – QUALITATIVE RESEARCH METHODS IN SOCIOLOGY**

3 credits.

Teaches how qualitative research can be used to advance sociological theory. Topics include inductive and deductive research designs in qualitative research, conducting and analyzing interviews, content analysis, conducting observations, focus groups and data management in qualitative research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC/ED POL 755 – METHODS OF QUALITATIVE RESEARCH**

3 credits.

Introduces qualitative, or ethnographic, research methods, emphasizing those suitable for educational and other organizational settings. Considers strengths and limitations of qualitative approaches in relation to varied research problems. Explores methodological procedures from entry into the field through writing.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SOC 756 – DEMOGRAPHIC TECHNIQUES II**

3 credits.

Intermediate to advanced tools used by demographers for studying the behavior of human populations: multiple decrement processes, stable population model, demographic relations in non-stable populations, model age patterns of vital events, indirect estimation methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SOC 773 – INTERMEDIATE CLASSICAL THEORY**

3 credits.

Intensive and critical examination of the major theoretical traditions involved in sociology's development since the 19th century.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/POP HLTH 797 – INTRODUCTION TO EPIDEMIOLOGY**

3 credits.

Design, implementation and interpretation of epidemiologic studies; emphasis on methodologic problems in the measurement of disease frequency, natural history and risk factors.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOC/FRENCH/GERMAN/HISTORY/POLI SCI 804 – INTERDISCIPLINARY WESTERN EUROPEAN AREA STUDIES SEMINAR**

3 credits.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOC/C&E SOC 875 – SPECIAL TOPICS**

1-4 credits.

Advanced topics in sociology. Topics vary.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC 901 – SEMINAR: TOPICS IN CURRENT SOCIOLOGY**

2-3 credits.

Critical review of most recent research in sociology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**SOC/C&E SOC/GEN&WS 904 – SOCIOLOGICAL PERSPECTIVES ON GENDER**

3 credits.

Advanced topics in the analysis of gender relations in society.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



**SOC/ED POL 908 – SEMINAR-SOCIOLOGY OF EDUCATION**

3 credits.

Selected topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**SOC 910 – TEACHING SOCIOLOGY**

3 credits.

Alternatives in course organization, instructional methods, and grading techniques with emphasis on teaching basic undergraduate courses.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**SOC/C&E SOC 913 – SEMINAR-SOCIAL CHANGE**

3 credits.

Advanced study of current research in social change, e.g., democratization in the Global South, labor movements, urban protests, social media campaigns.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**SOC 915 – SEMINAR-SOCIOLOGICAL THEORY**

3 credits.

Coordination of current theories and methods of relevance for sociological research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC 918 – SEMINAR IN COMPARATIVE SOCIOLOGY OF CONTEMPORARY CAPITALISM**

3 credits.

Origins and consequences of inter-regime and inter-temporal variation in the institutions of capitalism. The evolution and current trajectory of contemporary capitalism across North America, Europe, and East Asia. Theoretical debates on the dynamics, contradictions and variations of capitalist systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**SOC 919 – SEMINAR: TOPICS IN ECONOMIC SOCIOLOGY**

3 credits.

Explores the frontiers of research in economic sociology, drawing on recently published major work and on ongoing research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC/C&E SOC 922 – SEMINAR-RACE AND ETHNIC RELATIONS**

3 credits.

Theoretical, methodological, and current research problems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**SOC/C&E SOC 923 – SEMINAR-SOCIAL STRATIFICATION**

3 credits.

Advanced study of current research in social stratification, e.g., historical and comparative studies of inequality; mathematical and econometric modeling of mobility and achievement processes; demographic approaches to power and inequality.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC/URB R PL 924 – SEMINAR-POLITICAL SOCIOLOGY**

3 credits.

Selected topics in political sociology, e.g., social movements, citizenship, civic engagement, weakening of postwar "social democratic consensus" under financialized globalization pressures.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC/ANTHRO/C&E SOC/ECON 925 – SEMINAR: SOCIO-ECONOMIC CHANGE IN UNDERDEVELOPED AREAS**

2-3 credits.

Social and economic factors relating to stability, growth, and change in the non-Western areas of the contemporary world.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**SOC/C&E SOC 929 – SEMINAR: CLASS ANALYSIS AND HISTORICAL CHANGE**

3 credits.

Selected topics in Marxist theory and research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**SOC/C&E SOC 940 – SEMINAR-SOCIOLOGY OF ECONOMIC CHANGE**

3 credits.

Theoretical and technical problems in research concerning organizational and socio-psychological aspects of changes in large scale social systems.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC/C&E SOC 945 – SEMINAR-RURAL SOCIOLOGY**

3 credits.

Theory and research in alternate semesters in rural aspects of population, stratification, social change, and groups and institutions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC/C&E SOC 948 – SEMINAR: ENVIRONMENTAL SOCIOLOGY**

3 credits.

Examines topics such as theories of environment and society, the treadmill of production, environmental movements, political ecology, environmental justice, consumption, ecological modernization, sustainability, environmental risk, and the sociology of environmental science.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOC 952 – SEMINAR-MATHEMATICAL AND STATISTICAL APPLICATIONS IN SOCIOLOGY**

3 credits.

Selected topics in measurement and model construction in social research.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2020**SOC/ED POL 955 – SEMINAR-QUALITATIVE METHODOLOGY**

3 credits.

An intensive, practice-oriented exploration of one qualitative research method such as participant-observation, interviewing, narrative analysis, oral history or ethnography. Treatment of the method includes: logics of inquiry, analysis of data obtained through the method, and uses of the method.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**SOC/C&E SOC 960 – SEMINAR-CURRENT METHODOLOGICAL ISSUES IN SOCIAL PSYCHOLOGY**

3 credits.

Alternative research designs and processes, measurement, and analytical techniques in social psychology; experience in developing and utilizing research plans and techniques.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**SOC/C&E SOC 965 – SEMINAR-RECENT DEVELOPMENTS IN SOCIAL PSYCHOLOGY**

3 credits.

Current literature, emphasis on recent journal articles.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**SOC/C&E SOC 971 – SEMINAR-TOPICS IN DEMOGRAPHY AND ECOLOGY**

3 credits.

Advanced study of selected topics related to population and society, including health and inequality across the life course, environmental and spatial demography, biodemography.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**SOC/C&E SOC 972 – SEMINAR IN POPULATION AND DEVELOPMENT**

3 credits.

Examine current issues in population and development using conceptual tools of sociology and demography. Critique the motivations of agents and institutions involved in creating population policies and will evaluate the empirical evidence linking population processes and international development in its varied forms. Focus on the impact of international population priorities on the current relationship between population and development, with particular attention to gender, poverty, and health.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2018**SOC/C&E SOC 977 – SEMINAR-HUMAN ECOLOGY**

3 credits.

Review of ecological theory and research; critical assessment of the ecological complex (population, organization, environment, and technology); problems of measurement.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2020**SOC/HISTORY/URB R PL 979 – SEMINAR IN URBAN HISTORY**

3 credits.

Causes and consequences of urbanization, stressing social and economic aspects of major population movements, with particular attention to the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**SOC/A A E/ANTHRO/C&E SOC/GEOP/HISTORY/LACIS/POLI SCI/PORTUG/SPANISH 982 – INTERDEPARTMENTAL SEMINAR IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SOC 983 – RESEARCH: ECONOMIC SOCIOLOGY AND COMPARATIVE POLITICAL ECONOMY**

1-3 credits.

Presentation and discussion of on-going research in the area of comparative political economy and economic sociology.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC 984 – RESEARCH: SOCIOLOGY OF GENDER TRAINEES**

1-3 credits.

Workshop featuring presentations and discussion of current debates within the sociology of gender.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC/C&E SOC 985 – RESEARCH: COMMUNITY AND ENVIRONMENTAL SOCIOLOGY**

1-3 credits.

Critical analysis of recent theoretical and methodological issues through presentations of research in progress.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC/C&E SOC 987 – RESEARCH: RACE AND ETHNIC STUDIES**

1-3 credits.

Analysis of recent research and theory, based on reviews of literature and presentations of research in progress.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOC 990 – THESIS**

1-12 credits.

Mentored research for the Master's thesis or doctoral dissertation.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**SOC 991 – RESEARCH : SOCIAL PSYCHOLOGY TRAINEES**

1-3 credits.

Critical analysis of recent theoretical developments in social psychology and of research designed by participants.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**SOC 992 – RESEARCH: SOCIAL ORGANIZATION TRAINEES POLITICS, CULTURE, AND SOCIETY**

1-3 credits.

Workshop on current topics in political, cultural, and comparative historical sociology (e.g., social movements, citizenship, collective identities, political behaviors, attitudes).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC/C&E SOC 993 – RESEARCH: SOCIOLOGY OF ECONOMIC CHANGE TRAINEES**

1-3 credits.

Presentations of research in progress concerning social and economic change in developing countries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC 994 – COLLOQUIUM IN CRITICAL SOCIOLOGY**

1-3 credits.

Selected topics in critical sociology taught in intensive units.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**SOC/C&E SOC 995 – RESEARCH: METHODOLOGY TRAINEES**

1-3 credits.

Workshop on social science research methods and professional development, e.g. ethics, communication, data management, novel research methods.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC/C&E SOC 997 – RESEARCH: DEMOGRAPHY AND ECOLOGY TRAINEES**

1-3 credits.

Interdisciplinary training workshop on current research in population science from scholars at research and teaching institutions around the world.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOC 999 – READING AND RESEARCH IN SOCIOLOGY**

1-12 credits.

Independent reading and research.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

## SOIL SCIENCE (SOIL SCI)

**SOIL SCI 1 – COOPERATIVE EDUCATION/CO-OP IN SOIL SCIENCE**

1 credit.

Full-time off-campus work experience which combines classroom theory with practical knowledge of operations to provide students with a background upon which to base a professional career. Students receive credit only for the term in which they are actively enrolled and working. The same work experience may not count towards credit in Soil Science 399.

**Requisites:** Consent of instructor

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**SOIL SCI/ENVIR ST 101 – FORUM ON THE ENVIRONMENT**

1-2 credits.

Lectures and discussions about environmental issues. Historical and contemporary environmental impacts of humans on the biosphere. Global futures: population, technology, societal values, resources and prospects for sustainable management.

**Requisites:** None

**Course Designation:** Breadth - Either Social Science or Natural Science Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOIL SCI 131 – EARTH'S SOIL: NATURAL SCIENCE AND HUMAN USE**

1 credit.

A overview of the soils of the world and the grand environmental challenges that face humanity. Soils of the USA and Wisconsin included.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOIL SCI/ATM OCN 132 – EARTH'S WATER: NATURAL SCIENCE AND HUMAN USE**

3 credits.

Water is central to the functioning of planet Earth. As humans increase their impact on Earth's systems and cohabitants, our understanding of the multiple roles of water becomes critical to finding sustainable strategies for human and ecosystem health. Explores the science of Earth's hydrosphere, with constant attention to human uses and impacts.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOIL SCI 211 – SOILS AND CLIMATE CHANGE**

2 credits.

Soil represents the largest terrestrial pool of carbon, and our management of soil will play a key role in the future of our planet. Course topics include overviews of basic soil science and climate change science; how climate affects soil formation, soil carbon and soil organic matter; soil carbon dynamics in urban areas, the tropics, and the arctic; how humans influence soil carbon stocks around the globe.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**SOIL SCI/ENVIR ST/GEOG 230 – SOIL: ECOSYSTEM AND RESOURCE**

3 credits.

Soils are fundamental to ecosystem science. A systems approach is used to investigate how soils look and function. Topics investigated include soil structure, biology, water, fertility, and taxonomy as well as the human impact on the soil environment.

**Requisites:** Not open to students with credit for SOIL SCI 301**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SOIL SCI 250 – INTRODUCTION TO ENVIRONMENTAL SCIENCE**

3 credits.

Discuss how Planet Earth is an interconnected system dominated by the ever-present exchange of materials and energy that control the fitness and fate of all living organisms. Designed to introduce the interdisciplinary field of Environmental Science by providing a broad overview of the basic concepts used to make sense of the environment. Explore how natural systems work, the services they provide, important environmental challenges facing these systems, and how people are working to address them. Includes professionals in the field as guest speakers to discuss a future in Environmental Sciences.

**Requisites:** None**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Elementary

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SOIL SCI 289 – HONORS INDEPENDENT STUDY**

1-2 credits.

Research work under direct guidance of a Soil Science faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor. Intended for students in the CALS Honors Program.

**Requisites:** Consent of instructor**Course Designation:** Honors – Honors Only Courses (H)**Repeatable for Credit:** Yes, unlimited number of completions**SOIL SCI 299 – INDEPENDENT STUDY**

1-3 credits.

Research work under direct guidance of a faculty or instructional academic staff member. Students are responsible for arranging the work and credits with the supervising instructor.

**Requisites:** Consent of instructor**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SOIL SCI 301 – GENERAL SOIL SCIENCE**

3 credits.

Physical chemical and biological properties of soils as they affect soil-plant-water relations, soil classification and suitability for agricultural and other uses.

**Requisites:** (CHEM 103, 109, or 115) and (MATH 112, 114, 171 or placement into MATH 221), or graduate/professional standing**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SOIL SCI 302 – MEET YOUR SOIL: SOIL ANALYSIS AND INTERPRETATION LABORATORY**

1 credit.

Hands-on laboratory on soil analysis and interpretation of soil properties for different uses, such as food production, waste management, water quality, stormwater control, and environmental sustainability.

**Requisites:** (SOIL SCI/ENVIR ST/GEOG/ENVIR ST/SOIL SCI 230 or SOIL SCI 301, or concurrent enrollment) or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**SOIL SCI 305 – FIELD STUDY OF SOIL**

1 credit.

Intensive in situ description and evaluation of soil morphology. Field trips required.

**Requisites:** ENVIR ST/GEOG/SOIL SCI/ENVIR ST/GEOG 230 or SOIL SCI 301, or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**SOIL SCI 321 – SOILS AND ENVIRONMENTAL CHEMISTRY**

3 credits.

Sources, reactions, transport, effects, and fates of chemical species in soils and associated water and air environments. Emphasis on the chemical behavior of elements and compounds and the phenomena affecting natural and anthropogenic materials in soils.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SOIL SCI 322 – PHYSICAL PRINCIPLES OF SOIL AND WATER MANAGEMENT**

3 credits.

Soil physical properties and interactions as related to soil and water resource management and conservation. Water runoff (leading to soil erosion and surface water contamination); tillage and nutrient management; soil thermal and moisture regimes; solute movement; soil compaction, air and aeration.

**Requisites:** (PHYSICS 103, 201, 207 or 247) and SOIL SCI 301, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**SOIL SCI/PL PATH 323 – SOIL BIOLOGY**

3 credits.

Nature, activities and role of organisms inhabiting soil. Effects of soil biota on ecosystem function, response to cultural practices, and impacts on environmental quality, including bioremediation of contaminated soils.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/BIOLOGY 130, or BIOCORE 384) and (CHEM 104, 109, or 116), or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/ENVIR ST 324 – SOILS AND ENVIRONMENTAL QUALITY**

3 credits.

Interaction of soils with environmental contaminants and the role of soils in pollution control.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SOIL SCI 325 – SOILS AND LANDSCAPES**

3 credits.

Learn how to read the landscape and understand the relationships between soils, land use and landform. Discuss soil-forming factors, soil processes, soil classification, the 12 soil orders, soil survey and mapping. We will make several field trips and attendance is essential and required.

**Requisites:** ENVIR ST/GEOG/SOIL SCI/ENVIR ST/GEOG 230, SOIL SCI 301, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021



**SOIL SCI/AGRONOMY/HORT 326 – PLANT NUTRITION MANAGEMENT**

3 credits.

Functions, requirements and uptake of essential plant nutrients; chemical and microbial processes affecting nutrient availability; diagnosis of plant and soil nutrient status; fertilizers and efficient fertilizer use in different tillage systems.

**Requisites:** (CHEM 103, 109, or 115 and ENVIR ST/GEOG/SOIL SCI/ ENVIR ST/GEOG 230) or SOIL SCI 301, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 327 – ENVIRONMENTAL MONITORING AND SOIL CHARACTERIZATION FOR EARTH'S CRITICAL ZONE**

4 credits.

Characterization of a soil in the field. Monitoring water flow, heat exchange, solute transport and greenhouse gas emission using soil physical models and state-of-the-art soil sensing technologies.

**Requisites:** ENVIR ST/GEOG/SOIL SCI/ENVIR ST/GEOG 230, SOIL SCI 301, or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI 330 – HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE (HAZWOPER) AND FIELD SAFETY TRAINING**

1 credit.

Conforms to the guidelines covered under the Occupational Safety and Health Administration (OSHA) standard 29 CFR part 1910.120 for providing Hazardous Wasted Operations and Emergency Response (HAZWOPER) 40-hour certification, required for workers involved in clean-up operations, voluntary clean-up operations, emergency response operations, and the storage, disposal, or treatment of hazardous substances or uncontrolled hazardous waste sites. Beyond satisfying OSHA standards, provides safety training for personnel conducting field sampling operations in proximity of heavy equipment (e.g. excavators, drilling rigs, dump trucks) through guest lectures and videos. Additionally, case studies relating to field safety operations will be examined.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI/HORT 332 – TURFGRASS NUTRIENT AND WATER MANAGEMENT**

3 credits.

Nutrient requirements of turfgrasses; nature of turfgrass response to fertilization; soil and tissue testing methodology and interpretation; irrigation scheduling; irrigation water quality; use of irrigation and fertilizer to minimize environmental impact; writing effective nutrient management plans.

**Requisites:** AGRONOMY/HORT/SOIL SCI/AGRONOMY/HORT 326 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**SOIL SCI/AGRONOMY/ENTOM/HORT/PL PATH 354 – DIAGNOSING AND MONITORING PEST AND NUTRIENT STATUS OF FIELD CROPS**

1 credit.

Provides students with information necessary to diagnosis and monitor corn, soybean, alfalfa and wheat for pests (insects, weeds, diseases) and nutrient deficiency symptoms including perspectives from Agronomy, Entomology, Horticulture, Plant Pathology and Soil Science. Proper soil and pest sampling information will be provided as will proper cropstaging techniques which are essential for pest and nutrient management.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**SOIL SCI/AGRONOMY/BOTANY 370 – GRASSLAND ECOLOGY**

3 credits.

Understand factors driving global, continental, regional, and local distribution of grasslands. Discuss how management affects provision of grassland ecosystem goods and services. Compare and contrast plant community and ecosystem dynamics in native prairie and intensively managed pastures.

**Requisites:** BOTANY/PL PATH/BOTANY 123, BIOLOGY/BOTANY/ BIOLOGY 130, ENVIR ST/SOIL SCI/ENVIR ST 101, ATM OCN/ SOILSCI 132, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, BOTANY 100, or AGRONOMY 100, or graduate/ professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/BSE/CIV ENGR 372 – ON-SITE WASTE WATER TREATMENT AND DISPERSAL**

2 credits.

On-site treatment and dispersal of waste water from homes, commercial sources and small communities. Sources, pretreatment units, nutrient removal units, constructed wetlands, surface and soil dispersal systems, recycle and reuse systems, regulations, alternative collection systems.

**Requisites:** CHEM 103, 109, or 115

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI 375 – SPECIAL TOPICS**

1-3 credits.

Special topics on contemporary issues relevant to soil science.

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**SOIL SCI 399 – COORDINATIVE INTERNSHIP/COOPERATIVE EDUCATION**

1-8 credits.

An internship under guidance of a Soil Science faculty or instructional academic staff member and internship site supervisor. Students are responsible for arranging the work and credits with the Soil Science faculty or instructional academic staff member and the internship site supervisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Workplace - Workplace Experience Course

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**SOIL SCI 400 – STUDY ABROAD IN SOIL SCIENCE**

1-6 credits.

Provides an area equivalency for courses taken on Madison Study Abroad Programs that do not equate to existing UW courses. Current enrollment in a UW-Madison study abroad program

**Requisites:** None

**Repeatable for Credit:** Yes, unlimited number of completions

**SOIL SCI/MICROBIO 425 – ENVIRONMENTAL MICROBIOLOGY**

3 credits.

Microbial interactions in soils, water, extreme environments and biofilms. Modern methods for studying microbial ecology. role of microbes in nutrient cycles and biogeochemistry. Use of microbes for mitigating manmade environmental problems of industrial, agricultural, and domestic origin.

**Requisites:** MICROBIO 303 and (CHEM 341 or 343), or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI 430 – ENVIRONMENTAL SOIL CONTAMINATION**

3 credits.

Environmental pollution on global, regional, and local scales is one of humanity's most pressing issues, and will remain so for the foreseeable future. Examine the sources and properties of anthropogenic soil pollution including emerging contaminants such as PFAS, nanomaterials, microplastics. Apply the principles of soil science to understand the transport, mobilization, and partitioning of contaminants in soil and, in turn, how these contaminants affect ecosystem and human health. Through industry guest lecturers and case studies discuss methods to solve issues of soil contamination.

**Requisites:** (CHEM 103 and 104) or CHEM 109 or (CHEM 115 and 116) or graduate/professional student standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/F&W ECOL 451 – ENVIRONMENTAL BIOGEOCHEMISTRY**

3 credits.

Emphasis is given to a consideration of the processes influencing the distribution and cycling of chemical elements in native and anthropogenic ecosystem-level cycles of elements, and biogeochemical cycling in major soil-biome systems.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/AN SCI/DY SCI/FOOD SCI 472 – ANIMAL AGRICULTURE AND GLOBAL SUSTAINABLE DEVELOPMENT**

1 credit.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; food security, the role of women in agriculture, and the role of dairy products in a healthy diet.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### **SOIL SCI/AN SCI/DY SCI/FOOD SCI 473 – INTERNATIONAL FIELD STUDY IN ANIMAL AGRICULTURE AND SUSTAINABLE DEVELOPMENT**

2 credits.

Examines issues related to global agriculture and healthy sustainable development. Using a regional approach and focusing on crops and livestock case studies, students will learn the interdependence between US agriculture and agriculture in emerging economies. Some topics covered include population and food, immigration, the environment; crop and livestock agriculture; global trade; sustainability; and the role of women in agriculture and the role of dairy products in a healthy diet.

**Requisites:** DY SCI/AN SCI/FOOD SCI/SOIL SCI 472

**Repeatable for Credit:** No

### **SOIL SCI 499 – SOIL MANAGEMENT**

3 credits.

A capstone applying independent and team problem solving, critical thinking and oral and written communication skills to issues in soil and environmental sciences.

**Requisites:** Senior standing only and declared in Soil Science or Environmental Sciences

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOIL SCI/MICROBIO 523 – SOIL MICROBIOLOGY AND BIOCHEMISTRY**

3 credits.

Transformations of nutrients and contaminants in soils and groundwater by microorganisms: emphasis on enzymatic mechanisms and metabolic pathways. Approaches for analyzing microbial populations and activities including molecular techniques. Applications of microbial activities for bioremediation of contaminated soils and groundwater. Students should have completed one course in either Soil Science or Microbiology to feel comfortable with the course content.

**Requisites:** Senior standing, (CHEM 104, 109, or 116) and (BIOLOGY/ZOOLOGY/BIOLOGY 102, BIOLOGY/BOTANY/BIOLOGY 130, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151), or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SOIL SCI/F&W ECOL/HORT 524 – URBAN SOIL AND ENVIRONMENT**

3 credits.

Many environmental issues related to urbanization are derived from the manipulation of soil. By coupling contemporary literature in urban soils with soil science, students will be able to evaluate environmental issues within the urban environment and provide new ways of remediating their impact.

**Requisites:** (PHYSICS 103, 201, 207, or 247) and (ENVIR ST/GEOG/SOIL SCI/ENVIR ST/GEOG 230 or SOIL SCI 301 or concurrent), or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

### **SOIL SCI/GEOG 525 – SOIL GEOMORPHOLOGY**

3 credits.

Soil development as related to landscape throughout the Quaternary; focusing on the relationship of soils to climate and vegetation, landscape evolution, and time; principles of soil stratigraphy; case histories of soil geomorphic studies; field trips. Students should have completed one course in geomorphology to feel comfortable with the course content.

**Requisites:** SOIL SCI 325 or graduate/professional standing

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### **SOIL SCI/GEOG 526 – HUMAN TRANSFORMATIONS OF EARTH SURFACE PROCESSES**

3 credits.

Takes an earth systems approach to explore the role of human societies in shaping earth surface processes from local to global scales. We address how alterations to our landscapes and waterways affect biological, physical and chemical interactions among our biosphere, geosphere, hydrosphere and atmosphere. We discuss methods used to distinguish the "human impact" from background variability.

**Requisites:** Junior standing or GEOG/ENVIR ST/GEOG 120

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SOIL SCI/AGRONOMY/ATM OCN 532 – ENVIRONMENTAL BIOPHYSICS**

3 credits.

Plant-environment interactions with particular reference to energy exchanges and water relations. Models are used to provide a quantitative synthesis of information from plant physiology, soil physics, and micrometeorology with some consideration of plant-pest interactions. Students should have completed at least one course in Botany, Agronomy, or Plant Sciences to feel comfortable with the course content.

**Requisites:** BOTANY/BIOLOGY/BOTANY 130 and (MATH 211, 217, 221 or 275) and (PHYSICS 103, 201, 207, or 247), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/ENVIR ST 575 – ASSESSMENT OF ENVIRONMENTAL IMPACT**

3 credits.

Overview of methods for collecting and analyzing information about environmental impacts on agricultural and natural resources, including monitoring the physical environment and relating impacts to people and society.

**Requisites:** Junior standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 585 – USING R FOR SOIL AND ENVIRONMENTAL SCIENCES**

3 credits.

Data science techniques are increasingly important in soil and environmental science, improving the efficiency and repeatability of data analysis and enhancing fundamental understanding of soil and environmental issues. Various R packages will be introduced and used to analyze and process soil and environmental data collected using a variety of in situ, ground-based, and remote sensing platforms. R software will be applied to detailed case studies covering soil and environmental data processing, manipulation, and modeling.

**Requisites:** (STAT 240, 301, 324, 371, or STAT/FW ECOL/HORT/F&W ECOL/STAT 571) and (BSE 301, GEOG/CIV ENGR/ENVIR ST/CIV ENGR/GEOG 377, FW ECOL/ENVIR ST/G L E/GEOG/GEOSCI/LAND ARC/ENVIR ST/F&W ECOL/G L E/GEOG/GEOSCI 371, or 372), or graduate/professional standing

**Course Designation:** Breadth – Physical Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 601 – SPECIAL TOPICS IN SOIL SCIENCE**

1-3 credits.

Topics in various areas of soil science.

**Requisites:** Junior standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2015

**SOIL SCI/ENTOM/F&W ECOL/PL PATH 606 – COLLOQUIUM IN ENVIRONMENTAL TOXICOLOGY**

1 credit.

Current topics in molecular and environmental toxicology and problems related to biologically active substances in the environment. Topics vary each semester. Lectures are by resident and visiting professors and other researchers.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 or BIOLOGY/BOTANY/BIOLOGY 130 or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**SOIL SCI 621 – SOIL CHEMISTRY**

3 credits.

Solubility relationships, complex ions, ion exchange and oxidation-reduction reactions in soils.

**Requisites:** CHEM 104, 109, or 116, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SOIL SCI 622 – SOIL PHYSICS**

3 credits.

Physical properties of soils. Water retention and transmission in soils. Transport of heat, gas, and solutes. Physical environment of soil organisms and soil-plant-water relations.

**Requisites:** (MATH 211, 217, 221, or 275) and (PHYSICS 104, 202, 208, or 248) and SOIL SCI 301, or graduate/professional standing

**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SOIL SCI/CIV ENGR 623 – MICROBIOLOGY OF WATERBORNE PATHOGENS AND INDICATOR ORGANISMS**

3 credits.

Source, environmental fate and transport of major groups of waterborne pathogens, including epidemiology and testing of associated indicator organism. Management and treatment technologies for prevention of pathogen transmission.

**Requisites:** CIV ENGR 322 or MICROBIO/SOIL SCI/MICROBIO 523 or graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**SOIL SCI/BOTANY/HORT 626 – MINERAL NUTRITION OF PLANTS**

3 credits.

Essential and beneficial elements, solutions and soil as nutrient sources, rhizosphere chemistry, nutritional physiology, ion uptake and translocation, functions of elements, nutrient interactions, genetics of plant nutrition.

**Requisites:** BOTANY 500 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**SOIL SCI 630 – FIELD METHODS FOR ENVIRONMENTAL CHARACTERIZATION, ANALYSIS, AND MONITORING**

2 credits.

Introduce standard operating procedures and guidance for intrusive and non-intrusive sampling techniques for assessing soil, sediment, surface water, and ground water. Prepare boring logs and install groundwater monitoring well. Properly prepare samples for preservation and shipment. Prepare and maintain defensible field documentation. Use quality control sampling, data verification and validation, and data quality assessment. Decontaminate drilling and field sampling equipment and manage investigative-derived waste.

**Requisites:** Declared in Environmental Remediation and Management MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**SOIL SCI/CIV ENGR/M&ENVTOX 631 – TOXICANTS IN THE ENVIRONMENT: SOURCES, DISTRIBUTION, FATE, & EFFECTS**

3 credits.

Nature, sources, distribution, and fate of contaminants in air, water, soil, and food and potential for harmful exposure.

**Requisites:** (CHEM 104, 109, or 116) and (MATH 211, 217, 221, or 275) and PHYSICS (104, 202, 208, or 248)

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 681 – SENIOR HONORS THESIS**

2-4 credits.

Individual study for majors completing theses for Soil Science Honors degrees as arranged with a faculty member. Requires consent of supervising instructor. Enrolled in CALS Honors Program.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 682 – SENIOR HONORS THESIS**

2-4 credits.

Continuation of 681.

**Requisites:** Consent of instructor

**Course Designation:** Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2007

**SOIL SCI/ENVIR ST/LAND ARC 695 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN NATURAL RESOURCES**

3 credits.

Course has four components: 1) Detailed review of GIS concepts; 2) Case studies; 3) GIS implementation methods; 4) Laboratory to provide "hands-on" GIS experience.

**Requisites:** LAND ARC 211 or GEOG/CIV ENGR/ENVIR ST/CIV ENGR/ GEOG 377 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 699 – SPECIAL PROBLEMS**

1-3 credits.

Individual study for majors completing theses for Soil Science degrees as arranged with a faculty member. Requires consent of supervising instructor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOIL SCI 728 – GRADUATE SEMINAR**

1 credit.

Topical oral presentations by guest speakers and graduate students on contemporary concerns and issues involving land and soils.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOIL SCI 730 – COLLOQUIUM: ENVIRONMENTAL REMEDIATION AND MANAGEMENT**

1 credit.

Topical oral presentations by students, faculty, staff, and guest speakers on contemporary concerns and issues designed to increase knowledge and foster understanding of environmental contamination and remediation of soils and groundwater. Includes instruction and practice in public speaking, presentation visuals, resumes, and networking.

**Requisites:** Declared in Environmental Remediation and Management MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Fall 2022

**SOIL SCI 799 – PRACTICUM IN SOIL SCIENCE TEACHING**

1-3 credits.

Instructional orientation to teaching at the higher education level in the agricultural and life sciences, direct teaching experience under faculty supervision, experience in testing and evaluation of students, and the analysis of teaching performance.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SOIL SCI 875 – SPECIAL TOPICS**

1-4 credits.

Special topics on contemporary issues relevant to soil science.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SOIL SCI 990 – RESEARCH**

1-12 credits.

Independent research and writing to complete dissertation requirements.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SPANISH (SPANISH AND PORTUGUESE) (SPANISH)****SPANISH 101 – FIRST SEMESTER SPANISH**

4 credits.

All basic language skills: listening comprehension, speaking, reading, and writing. Requires no previous knowledge of Spanish.

**Requisites:** None

**Course Designation:** Frgn Lang - 1st semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 102 – SECOND SEMESTER SPANISH**

4 credits.

Continuation of SPANISH 101. All basic language skills: listening comprehension, speaking, reading, and writing.

**Requisites:** SPANISH 101 or placement into SPANISH 102

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 103 – FIRST YEAR INTENSIVE SPANISH**

6 credits.

Accelerated introduction to Spanish language practice through writing, reading, speaking and listening. Course equivalent to SPANISH 101 and 102.

**Requisites:** Not open to students with credit for SPANISH 102.

**Course Designation:** Frgn Lang - 2nd semester language course  
Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2020

**SPANISH 203 – THIRD SEMESTER SPANISH**

4 credits.

Intermediate-level language review, Hispanic readings, culture, and patterns of conversation.

**Requisites:** SPANISH 102, 103 or placement into SPANISH 203

**Course Designation:** Frgn Lang - 3rd semester language course  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023



**SPANISH 204 – FOURTH SEMESTER SPANISH**

4 credits.

Intermediate-level language review, extensive Hispanic readings and culture, intensive written and oral activities.

**Requisites:** SPANISH 203 or placement into SPANISH 204

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 206 – FIRST SEMESTER SPANISH FOR SPANISH SPEAKERS**

4 credits.

Review of grammar, orthography, and vocabulary to develop formal, academic communication skills in the oral and written domains. Designed for heritage speakers of Spanish that already understand and speak some variety of Spanish.

**Requisites:** Consent of instructor

**Course Designation:** Frgn Lang - 3rd semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**SPANISH 207 – SECOND SEMESTER SPANISH FOR NATIVE OR HERITAGE SPANISH SPEAKERS**

4 credits.

Reading and writing in Spanish, supported by the focused study of Spanish grammar and its oral application.

**Requisites:** SPANISH 206

**Course Designation:** Frgn Lang - 4th semester language course

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2014

**SPANISH 223 – INTRODUCTION TO HISPANIC CULTURES**

3 credits.

Introduction to the issues which shape the national cultures and the cultural practices of the Hispanic world. Emphasis on diversity, emergence of new imagined communities, cultural hybridity, and social movements within a historical framework.

**Requisites:** SPANISH 226 or concurrent enrollment, or SPANISH 311 or concurrent enrollment

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 224 – INTRODUCTION TO HISPANIC LITERATURES**

3 credits.

An introduction to reading and analyzing literary works, with special emphasis on development of oral and written skills for the discussion of literature. Concentration on methods of analyzing basic literary forms, conventions, genres, and representative short texts in Spanish.

**Requisites:** SPANISH 226 or concurrent enrollment, or SPANISH 311 or concurrent enrollment

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 225 – LYING, SWEARING, AND BREAKING THE RULES: AN INTRODUCTION TO THE LINGUISTIC STUDY OF SPANISH**

3 credits.

Introduction to the basic concepts of linguistics as a discipline and explore real-world Spanish use (e.g., blogs and vlogs, language corpora, press, film, recorded conversations, class visitors, etc.) and how that use varies across regions, speakers, and communicative contexts. Through examination of how different Spanish speakers deploy language in contexts such as confronting social taboos, expressing humor, being polite (or impolite), persuading particular audiences, and negotiating individual and cultural identities, students will gain a foundational understanding of several areas of linguistic study, including phonetics/ phonology, morphosyntax, pragmatics, sociolinguistics, language ideologies, and language variation and change.

**Requisites:** SPANISH 226 or concurrent enrollment, or SPANISH 311 or concurrent enrollment

**Course Designation:** Breadth - Humanities

Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 226 – INTERMEDIATE LANGUAGE PRACTICE WITH EMPHASIS ON WRITING AND GRAMMAR**

3 credits.

Intensive practice in reading, writing, and grammar.

**Requisites:** SPANISH 204 or placement into SPANISH 226 or SPANISH 311

**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH/AFROAMER/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/POLI SCI/SOC 260 – LATIN AMERICA: AN INTRODUCTION**

3-4 credits.

Latin American culture and society from an interdisciplinary perspective; historical developments from pre-Columbian times to the present; political movements; economic problems; social change; ecology in tropical Latin America; legal systems; literature and the arts; cultural contrasts involving the US and Latin America; land reform; labor movements; capitalism, socialism, imperialism; mass media.

**Requisites:** None**Course Designation:** Breadth - Social Science

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SPANISH/LACIS 285 – RACE AND CULTURE IN THE AMERICAS**

3 credits.

Examine how the experiences of marginalized groups in the U.S. are profoundly intertwined with hemispheric historical processes. Review the categories that emerged to conceptualize human difference as European colonizers dispossessed indigenous peoples of their lands and inaugurated the forced migration and enslavement of peoples from Africa. Focus on how race was transformed after the revolutions of independence, exploring key concepts such as the one drop rule, mestizaje, racial democracy, and color-blindness. Explore how race intersects with gender, class, and migration, as well as with slavery, anti-colonial struggles, and US expansionism. Examine common assumptions in comparisons of race relations -e.g., the idea of a more "fluid" understanding of race in Latin American countries, versus the binary models of the U.S.

**Requisites:** None**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**SPANISH 299 – DIRECTED STUDY**

1-3 credits.

Directed study projects for freshmen and sophomores as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Summer 2018**SPANISH 311 – ADVANCED LANGUAGE PRACTICE**

3 credits.

Advanced language practice, including intensive writing and work in pertinent areas of grammar and stylistics.

**Requisites:** SPANISH 226 or placement into SPANISH 311**Course Designation:** Frgn Lang - 5th + semester language course

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SPANISH 317 – SPANISH FOR NURSING**

3 credits.

Covers professional oral and written Spanish communication skills to prepare for interactions with Spanish-speaking patients in a clinical setting. Conducted entirely in Spanish.

**Requisites:** (Declared in Nursing BSN or classified as Pre-Nursing PRN and SPANISH 203) or declared in Nursing Practice DNP or Nursing PhD**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2020**SPANISH 318 – SPANISH FOR PHARMACY**

3 credits.

Teaches professional oral and written Spanish communication skills for use in the setting of a pharmacy to communicate with Spanish-speaking patients. Conducted entirely in Spanish. A minimum of three semesters of undergraduate Spanish coursework recommended.

**Requisites:** Declared in Doctor of Pharmacy program**Repeatable for Credit:** No**SPANISH 319 – TOPICS IN SPANISH LANGUAGE PRACTICE**

1-3 credits.

Intensive oral and written practice in major areas of Spanish professional usage. Each offering will focus on an important field in which students tend to apply their language skills (journalism, commerce, medicine, law, social services, etc.).

**Requisites:** SPANISH 311**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH 320 – SPANISH PHONETICS**

3 credits.

Practice course for improvement of pronunciation, and introduction to transcription and phonetic and phonemic analysis.

**Requisites:** SPANISH 225**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SPANISH 321 – THE STRUCTURE OF MODERN SPANISH**

3 credits.

Structure and usage of modern Spanish through an examination of linguistic phenomena found throughout the Spanish-speaking world. Analyze authentic speech and texts of varied genres (newspaper articles, literature, advertisements, blogs, etc.) both to understand the conventions of modern Spanish structure and usage, and to investigate how grammatical structure may be manipulated by Spanish speakers (including themselves) to accomplish particular communicative goals.

**Requisites:** SPANISH 225**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022

**SPANISH 322 – SURVEY OF EARLY HISPANIC LITERATURE**

3 credits.

Selected readings, discussions, and literary history of Spain and Spanish America through 1700.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 323 – ADVANCED LANGUAGE PRACTICE WITH EMPHASIS ON EXPOSITORY WRITING**

3 credits.

Analysis of important questions of syntax, style, and idiomatic Spanish, with emphasis on expository writing.

**Requisites:** SPANISH 311

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**SPANISH 324 – SURVEY OF MODERN SPANISH LITERATURE**

3 credits.

Readings, discussions, literary history. Eighteenth century to present.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 325 – ADVANCED CONVERSATION**

3 credits.

Practice and improve conversational Spanish. Form and present opinions about a variety of cultural and social issues that affect Latin America and the US by using appropriate vocabulary and language.

**Requisites:** SPANISH 226 or 311

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 326 – SURVEY OF SPANISH AMERICAN LITERATURE**

3 credits.

Introduction to the study of Spanish American literature; reading, discussions, literary history. Eighteenth century to present.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 327 – INTRODUCTION TO SPANISH LINGUISTICS**

3 credits.

Introduction to the linguistic analysis of Spanish, including morphology, syntax, dialectology, history of the language, language acquisition, and sociolinguistic variation.

**Requisites:** SPANISH 225

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH/INTL BUS 329 – SPANISH FOR BUSINESS**

3 credits.

Spanish lexicon and linguistic style for management, banking, accounting, capital investment, personnel and office systems, production of goods and services, marketing, finance, and import/export; includes translation and interpretive activities.

**Requisites:** SPANISH 311

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SPANISH 331 – SPANISH APPLIED LINGUISTICS**

3 credits.

Provides an overview of second language acquisition theories and processes as they pertain to Spanish second language learners and characterizes the linguistic challenge that specific Spanish structures pose for English-speakers in particular.

**Requisites:** SPANISH 225

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SPANISH 359 – SPANISH BUSINESS AREA STUDIES**

3 credits.

Spanish business language, culture and practice within Spanish-speaking economic markets.

**Requisites:** SPANISH 311

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 361 – SPANISH CIVILIZATION**

3 credits.

Cultural evolution from medieval period through the present; illustrated lectures. Taught in Spanish.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 363 – SPANISH AMERICAN CIVILIZATION**

3 credits.

Cultural evolution of Spanish America from pre-Hispanic days through the present. Conducted in Spanish.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SPANISH/CHICLA 364 – SURVEY OF LATINO AND LATINA POPULAR CULTURE**

3 credits.

Analysis of Latina and Latino popular culture to consider the varied make-up of Latinos, their specific histories, social dynamics and politics through their creative expressions, performances and cultural contestations. Covers key terms and concepts, cultural developments, and diverse interpretations while focusing in the analysis of Latinx music, performance art, film and media, sports, food, and car culture. Other topics include the production, circulation and reception of Latinx popular culture, the use of Spanish and English languages, issues of identity, migration and interculturality, the role of the cultural industry, and the context of globalization. Broadly explores the intersectionality of race, ethnicity, class, gender, sexuality, and nation regarding Latinos. Taught in Spanish.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SPANISH/MEDIEVAL 414 – LITERATURA DE LA EDAD MEDIA CASTELLANA (SS. XII-XV)**

3 credits.

The study of a particular author, work, topic, or literary genre of the Middle Ages and/or Early Renaissance (through 15th century): Poema de mio Cid, mester de juglaria, Libro de buen amor, mester de clerecia, El conde Lucanor, La Celestina, etc.

**Requisites:** SPANISH 223 and 224. Graduate students may not enroll

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SPANISH 417 – LITERATURA DEL SIGLO DE ORO**

3-4 credits.

A monograph on a particular author, work, or literary genre of the Golden Age: Cervantes, Lope de Vega, La Celestina, the picaresque novel, etc.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2016

**SPANISH 420 – ADVANCED SPANISH PHONETICS**

3 credits.

Connects the topics discussed in SPANISH 320 with concrete, physical speech signals. Learn to detect vocal fold vibration, evidence of tongue position, degree of closure between two organs, and friction caused by organ configuration, among other features, through the use of specialized software. Discuss sound experimental designs. Identify a specific set of sound system challenges that speakers of English face when learning Spanish. With regard to all of these issues, discuss address perception and production data, and data coming from native speakers and second language learners. Comparisons between Spanish data and those of English and other Romance languages.

**Requisites:** SPANISH 320

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH/FRENCH/ITALIAN/PORTUG 429 – INTRODUCTION TO THE ROMANCE LANGUAGES**

3 credits.

Introduction to structural similarities and differences apparent in major Romance languages (French, Italian, Portuguese, Spanish) and to their historical developments, with reference to basic linguistic features of each language: phonology, morphology, syntax, and lexicon.

**Requisites:** SPANISH 226, FRENCH 228, ITALIAN 311, or PORTUG 226

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 430 – SPANISH IN THE UNITED STATES**

3 credits.

Focus on the Spanish language in the United States from a sociolinguistic perspective. Comprises three goals: 1) presentation of the main linguistic characteristics represented in the Spanish of the United States (from both speakers that brought their variety from their home country, and Spanish speakers born in the United States); 2) examination of the main aspects related to the acquisition of Spanish as a minority language and phenomena related to English-Spanish language contact; and 3) understanding the socio-cultural aspects connected with the presence and vitality of Spanish in the United States (e.g., Spanish in the public, political, and educational contexts; linguistic identity, linguistic discrimination).

**Requisites:** SPANISH 225**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SPANISH 435 – CERVANTES**

3 credits.

Development of Cervantes as a craftsman and thinker; linguistic and philosophical commentaries on Don Quixote and significant major works.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SPANISH/ENVIR ST 445 – CULTURE AND THE ENVIRONMENT IN THE LUSO-HISPANIC WORLD**

3 credits.

Investigates how economy and culture work together, consuming and/or restoring their environments in divergent scenarios of the Hispanic World.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**SPANISH 446 – TOPICS IN SPANISH LINGUISTICS**

3 credits.

Advanced descriptive, historical, or applied topics in Spanish linguistics.

**Requisites:** SPANISH 225**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH 451 – LITERATURE OF THE EIGHTEENTH AND NINETEENTH CENTURIES**

3 credits.

Historical survey of the literature of the eighteenth and nineteenth centuries. Major authors and representative works in all genres covering Neo-Classicism, Romanticism, Realism, and Naturalism. Important currents in intellectual history.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**SPANISH 453 – LITERATURE OF THE TWENTIETH CENTURY**

3 credits.

Historical survey of the literature of the Twentieth Century. Major authors and representative works in all genres beginning with the Generation of 1898 to the present. Important currents in intellectual history.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2019**SPANISH 460 – LITERATURA HISPANOAMERICANA**

3 credits.

A monograph on a particular author, work or literary current of Latin America: Modernismo, the novel of protest, Latin American theater, etc.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SPANISH 461 – THE SPANISH AMERICAN SHORT STORY**

3 credits.

Development of the short story throughout Spanish America from its origins in the 19th century to the present.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2021

### SPANISH 462 – SPANISH AMERICAN THEATER AND DRAMA

3 credits.

Major dramatic writers in Spanish America from Sor Juana Ines de la Cruz to contemporary practitioners of avant-garde theater.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

### SPANISH 464 – SPANISH AMERICAN POETRY AND ESSAY

3 credits.

Readings in the work of major Spanish American poets and essayists within a historical framework.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

### SPANISH 466 – TOPICS IN SPANISH AMERICAN LITERATURE

1 credit.

Intensive study of an important author or theme in Spanish American literature. Content will vary with each offering.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

### SPANISH/CHICLA 467 – US LATINO LITERATURE

3 credits.

Study the literature of Latinos and Latinas in the United States, particularly of writers of Mexican, Puerto Rican, Cuban, Dominican and Central American descent. Examines the impact of race and how individuals and communities negotiate situations of internal colonialism, migration, generational conflicts, tensions between assimilation and cultural preservation, gender roles, literary traditions, and transnational situations. Considers the linguistic, cultural and formal singularity of Latinx literature, the use of Spanish and English languages, the advent of feminist and queer writing, and the vision of the United States in their works regarding its past, its present and its future. Explores the intersectionality of race, ethnicity, class, gender, sexuality, and literary forms. Diverse theories and ways to read literary texts will be explored. Literary texts - novels, short stories, poetry and essays - will be read in English or Spanish, or a combination of both. Taught in Spanish

**Requisites:** SPANISH 223 and 224

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### SPANISH 468 – TOPICS IN HISPANIC CULTURE

3 credits.

In-depth study of important cultural-historical issues concerning the Hispanic world.

**Requisites:** (SPANISH 223 and 224) or SPANISH 361 or 363

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### SPANISH/CHICLA 469 – TOPICS IN LATINX CULTURE

3 credits.

Focuses on the cultural evolution of Chicanos, Puerto Ricans, Cuban-Americans, and other U.S. Latinos in relation to their countries of origin. Topics vary.

**Requisites:** SPANISH 223 and 224 or (SPANISH 361, 363, or 468)

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2021



**SPANISH 470 – UNDERGRADUATE SEMINARS IN HISPANIC LITERATURE/CULTURE/LINGUISTICS**

3 credits.

Advanced undergraduate seminar with particular emphasis on discussion and research of advanced topics related to Hispanic literature, linguistics, or culture.

**Requisites:** SPANISH 223, 224, 225, and 311

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SPANISH 472 – HISPANIC SCREEN STUDIES**

3 credits.

An introduction to audiovisual media in the Spanish-speaking world. Topics may include cinema, television, video and video gaming. Learn basic technical vocabulary, analytical concepts and industrial history for specific media and consider theoretical issues relating to the integration of those media in various local cultures. Special attention will be paid to the economic, technological, social and political conditions that have determined the differential development of the various screen arts in Spanish-speaking countries.

**Requisites:** SPANISH 223, 224 and 311

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SPANISH 473 – STUDY ABROAD IN SPANISH LANGUAGE PRACTICE**

1-4 credits.

Treatment of a topic in Spanish language in a course carried with a UW-Madison resident study abroad program that has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SPANISH 474 – STUDY ABROAD IN SPANISH LINGUISTICS**

1-4 credits.

Treatment of a topic in Spanish linguistics in a course carried with a UW-Madison resident study abroad program that has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SPANISH 475 – STUDY ABROAD IN HISPANIC LITERATURES**

1-4 credits.

Treatment of a topic in Hispanic literatures in a course carried with a UW-Madison resident study abroad program that has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SPANISH 476 – STUDY ABROAD IN HISPANIC CULTURES**

1-4 credits.

Treatment of a topic in Hispanic cultures in a course carried with a UW-Madison resident study abroad program that has no equivalent on this campus. Enrollment in a UW-Madison resident study abroad program

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**SPANISH 477 – LATIN AMERICAN ROCK CULTURES**

3 credits.

Rock'n'roll music emerged in the USA in the 1950s, and almost immediately became a global phenomena, intimately associated to the scheme of Western modernity, informing music and cultural expressions in many parts of world. Seeks to study this transnational process, and the culture and music that were produced in Latin America.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SPANISH/CHICLA 478 – BORDER AND RACE STUDIES IN LATIN AMERICA**

3 credits.

Drawing from cultural studies, border studies and/or critical race theory, this course explores through cultural and literary texts the social and political issues regarding migration, contact zones, transculturation, and/or diaspora.

**Requisites:** SPANISH 223 and 224

**Course Designation:** Breadth – Humanities

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SPANISH 479 – LATIN AMERICAN LITERATURE AND HUMAN RIGHTS**

3 credits.

Explores the literary culture that emerged in Latin American countries after the military dictatorships in the seventies and eighties. Engage with cultural responses to human rights abuses in order to determine what kind of memory was invoked through available cultural venues and what kind of memory market has been created as a response to neo-liberal economic project. Looks into the means by which literary and cultural responses are produced, circulated and consumed, what seems to be remembered and forgotten as well as who takes ownership of memories and how the state produced official story compares with individual as well as community generated accounts.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2022**SPANISH 480 – TOPICS IN LATIN AMERICAN PERFORMANCE/ VISUAL STUDIES**

3 credits.

Latin American culture and politics through the study of selected aspects of performance and/or visual culture. Topics vary.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH 490 – RACE, RELIGION AND ETHNICITY IN THE AGE OF EMPIRE**

3 credits.

Drawing mainly from early modern Spanish and Colonial texts, this course will explore encounters and relations with different forms of "otherness". We will move from America to Spain and across the Mediterranean world to Istanbul, from the late 15th century to the 17th. Issues of race, ethnicity, and religious affiliation will take on diverse forms throughout the course. Spain's long history of relations between Muslims, Jews and Christians will form a backdrop to interactions with Amerindians, sub-Saharan Africans, Jews, Moriscos, Gypsies, North African Muslims and Turks. One of the millions of slaves during this period was Miguel de Cervantes, author of Don Quixote. He and many other writers would reflect profoundly on questions of "otherness" in works that would have universal implications and continue to connect with our concerns in the 21st century. Such works will guide us through this course, as will a wide array of visual resources from that era and our own.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022**SPANISH 501 – SURVEY OF SPANISH AMERICAN LITERATURE FROM THE DISCOVERY TO MODERNISMO**

3 credits.

Introduction to the major trends and genres of Spanish American Literature, from the Discovery to Modernism.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2015**SPANISH 502 – SURVEY OF SPANISH AMERICAN LITERATURE FROM MODERNISMO TO THE PRESENT**

3 credits.

Introduction to major trends and genres of 20th and 21st Spanish American Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**SPANISH/MEDIEVAL 503 – SURVEY OF MEDIEVAL LITERATURE**

3 credits.

Introduction to major 13th and 14th-century Castilian works.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**SPANISH/MEDIEVAL 504 – SURVEY OF MEDIEVAL LITERATURE**

3 credits.

Introduction to major 14th and 15th-century Castilian works.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017

**SPANISH 505 – ADVANCED SURVEY OF SPANISH LITERATURE**

3 credits.

Advanced Survey of Golden Age Spanish Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**SPANISH 506 – ADVANCED SURVEY OF SPANISH LITERATURE**

3 credits.

Survey of Modern Peninsular Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017**SPANISH/MEDIEVAL 541 – OLD SPANISH**

3 credits.

Historical Spanish phonology, morphology, and syntax, with application to theories of language variation and change.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2018**SPANISH 543 – SPANISH PHONOLOGY**

3 credits.

Introduction to sound patterns of Spanish through the lenses of linear and non-linear generative phonology.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2016**SPANISH 544 – CONTEMPORARY ISSUES IN APPLIED SPANISH LINGUISTICS**

3 credits.

Linguistic concepts, theories and research methodologies as they are applied to Spanish teaching methodology, bilingualism, and L2 acquisition of Spanish.

**Requisites:** Graduate/professional standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2018**SPANISH 545 – COLLEGE TEACHING OF SPANISH**

2 credits.

Introduction to Spanish teaching methodology: classroom procedures, lesson planning, drilling techniques, preparation and evaluation of testing devices, current trends in language teaching, audio-visual aids, review of key grammatical concepts, etc.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2018**SPANISH 548 – STRUCTURE OF THE SPANISH LANGUAGE: MORPHOLOGY AND SYNTAX**

3 credits.

Introduction to generative syntax with specific application to Spanish.

**Requisites:** Graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2017**SPANISH 564 – THEORY AND PRACTICE OF HISPANIC THEATRE**

4 credits.

An in-depth study of Hispanic theatre through the analysis of dramatic texts as well as the production of live performance. By reading and staging a final play students explore the full value of dramatic arts.

**Requisites:** SPANISH 223 and 224**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2020

**SPANISH 627 – HISTORIA DE TEORIA LITERARIA: DE PLATON AL SIGLO XVIII**

3 credits.

Historical survey of major currents of literary theory in Europe, beginning with Plato and ending with Neo-classicism.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**SPANISH 628 – HISTORIA DE TEORIA LITERARIA: SIGLOS XIX-XX**

3 credits.

Modern literary theories with special attention to Hispanic literatures.

**Requisites:** Graduate/professional standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**SPANISH 630 – TOPICS IN HISPANIC LINGUISTICS**

3 credits.

Advanced course focusing on particular theories, approaches, and/or methodologies concerned with Spanish linguistics.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SPANISH 681 – SENIOR HONORS THESIS**

3 credits.

First semester independent study with the goal to do the preliminary research to write a senior honors thesis in Spanish.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**SPANISH 682 – SENIOR HONORS THESIS**

3 credits.

Second semester independent study with the goal to complete a senior honors thesis in Spanish. SPANISH 681

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SPANISH 691 – FIRST SEMESTER SENIOR THESIS**

3 credits.

First semester independent study with the goal to do the preliminary research to write a senior thesis in Spanish.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**SPANISH 692 – SECOND SEMESTER SENIOR THESIS**

3 credits.

Second semester independent study with the goal to complete a senior thesis in Spanish. SPANISH 691

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**SPANISH 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects for juniors and seniors as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SPANISH 701 – TEXTUAL CRITICISM**

3 credits.

Multiple alterities: religious affiliations, ethnicities, race, and gender in early modern America, Spain and the Mediterranean.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2019

**SPANISH 715 – TOPICS IN HISPANIC CULTURAL STUDIES**

3 credits.

Study of culture in the context of Hispanic studies.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**SPANISH/MEDIEVAL 718 – TOPICS IN MEDIEVAL SPANISH LITERATURE**

3 credits.

An advanced topics course focusing on themes, particular authors, individual works, or literary genres in medieval Spanish literature.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2019

**SPANISH 770 – INTRODUCTION TO THE PROFESSION**

3 credits.

Introduction to Spanish teaching methodology: classroom procedures, lesson planning, preparation and evaluation of testing devices, current trends in language teaching, audio visual aids, etc. Other aspects of working in academia are incorporated as well, such as research (intertwining it with teaching, abstracts, conferences, publishing, etc.) and professionalization (building a CV, the job market, cover letters, research statements, teaching philosophies, etc.), both of which are guided by the instructor and faculty visitors from the Department of Spanish Portuguese.

**Requisites:** Graduate Students Only**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**SPANISH 771 – WRITING FOR THE PROFESSION**

3 credits.

Overview of relevant academic genres through readings and extensive practice in writing, critiquing and editing. Genres include conference paper writing and delivery; grant applications; how to prepare an article for submission, how to choose a journal or a press, and the editorial process from consideration of a manuscript until final publication; to prepare a dissertation proposal, write a dissertation chapter, and an abstract for the job market. Students will work on their choice projects throughout the semester.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**SPANISH 801 – SEMINAR-SPANISH AMERICAN LITERATURE**

3 credits.

Seminar focusing on literature, literary criticism, or theory relevant to colonial and 19th-century Spanish American literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SPANISH 802 – SEMINAR-SPANISH AMERICAN LITERATURE**

3 credits.

Seminar focusing on literature, literary criticism, culture or theory relevant to 20th and 21st Spanish American Lit.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH 815 – SEMINAR IN LANGUAGE: MODERN SPANISH**

3 credits.

Seminar focusing on theoretical, methodological, and applied approaches to a specific topic related to current Spanish (e.g., Second Language acquisition, Applied Linguistics, Syntax, Semantics, Phonetics, Phonology, Language variation and change).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2019**SPANISH 831 – SEMINAR: HISPANIC DIALECTOLOGY**

3 credits.

Seminar focusing on the description and analysis of linguistic variation of a Spanish speaking region (Peninsular Spanish, Latin American Spanish, including Spanish in the US).

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**SPANISH/MEDIEVAL 842 – SEMINAR-MEDIEVAL LITERATURE**

3 credits.

Seminar focusing on literary, textual criticism or theoretical topics relevant to Medieval Spanish literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SPANISH 850 – SEMINAR IN GOLDEN AGE DRAMA**

3 credits.

Focuses on dramatic texts and theatrical traditions of 16th-and 17th century Spain.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**SPANISH 851 – SEMINAR IN GOLDEN AGE PROSE: CERVANTES DON QUIJOTE**

3 credits.

In-depth reading of Cervantes' masterpiece, including a thorough study of its historical context and its place in the history of fiction.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2016

**SPANISH 852 – SEMINAR IN GOLDEN AGE PROSE**

3 credits.

Studies in the emergence of the modern novel with the invention of short and long novel forms as well as the development of intellectual and scientific works, including literature about other parts of the world, picaresque novels, courtly novels, pastoral novels, Moorish novels, autobiographies, travel narratives, mystic writings, humanistic dialogues, histories, geographies, and treatises on a wide array of topics.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2022**SPANISH 861 – SEMINAR-MODERN SPANISH LITERATURE**

3 credits.

Literary, cultural, or theoretical topics relevant to Modern Peninsular Literature.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH 882 – SEMINAR IN HISPANIC CULTURE**

3 credits.

Seminar focusing on literary, cultural and/or theoretical topics relevant to Spanish and/or Spanish-American culture. Taught in English.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2016**SPANISH 899 – INDEPENDENT READING**

1-3 credits.

Directed study projects for graduate students as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SPANISH/A A E/ANTHRO/C&E SOC/GEOG/HISTORY/LACIS/  
POLI SCI/PORTUG/SOC 982 – INTERDEPARTMENTAL SEMINAR  
IN THE LATIN-AMERICAN AREA**

1-3 credits.

Interdisciplinary inquiry in Latin American society and culture.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**SPANISH 990 – THESIS**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**STATISTICS (STAT)****STAT 240 – DATA SCIENCE MODELING I**

4 credits.

Introduces reproducible data management, modeling, and analysis through a practical, hands-on case studies approach. Topics include the use of an integrated statistical computing environment, data wrangling, the R programming language, data graphics and visualization, random variables and concepts of probability, data modeling, and report generation using R Markdown with applications to a wide variety of data to address open-ended questions.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**STAT 301 – INTRODUCTION TO STATISTICAL METHODS**

3 credits.

Distributions, measures of central tendency, dispersion and shape, the normal distribution; experiments to compare means, standard errors, confidence intervals; effects of departure from assumption; method of least squares, regression, correlation, assumptions and limitations; basic ideas of experimental design.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement. Not open to students with credit for STAT 302, 324, or 371**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Breadth - Natural Science

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**STAT 302 – ACCELERATED INTRODUCTION TO STATISTICAL METHODS**

3 credits.

Graphical and numerical exploration of data; standard errors; distributions for statistical models including binomial, Poisson, normal; estimation; hypothesis testing; randomization tests; basic principles of experimental design; regression; ANOVA; categorical data analysis; goodness of fit; application.

**Requisites:** MATH 217, 221, or 275. Not open to students who have completed STAT 324, or 371

**Course Designation:** Gen Ed – Quantitative Reasoning Part B  
Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**STAT 303 – R FOR STATISTICS I**

1 credit.

An understanding of the commonly used statistical language R. Topics will include using R to manipulate data and perform exploratory data analysis.

**Requisites:** STAT 240, 301, 302, 312, 324, 371, STAT/MATH/STAT 310, ECON 310, GEN BUS 303, 304, 306, 307, PSYCH 210, CE SOC/SOC/C&E SOC 360, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 304 – R FOR STATISTICS II**

1 credit.

Provides an understanding of the commonly used statistical language R. Topics will include writing conditional expressions, loops, and functions; manipulating data matrices and arrays; extracting data from text; and making high level visualizations of data.

**Requisites:** STAT 303 (or STAT 327-Intro Data Analysis with R prior to Fall 2019)

**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 305 – R FOR STATISTICS III**

1 credit.

Provides an understanding of the commonly used statistical language R. Students will learn to combine R with high performance computing tools to do scientific computing.

**Requisites:** STAT 304 (or STAT 327-Intermed. Data Analysis with R prior to Fall 2019)

**Course Designation:** Breadth – Natural Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/MATH 309 – INTRODUCTION TO PROBABILITY AND MATHEMATICAL STATISTICS I**

3 credits.

Probability and combinatorial methods, discrete and continuous, univariate and multivariate distributions, expected values, moments, normal distribution and derived distributions, estimation.

**Requisites:** MATH 234, 376, or concurrent enrollment. Not open to students with credit for MATH/STAT/MATH 431 or STAT 311

**Course Designation:** Breadth – Natural Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/MATH 310 – INTRODUCTION TO PROBABILITY AND MATHEMATICAL STATISTICS II**

3 credits.

Mathematical statistical inference aims at providing an understanding of likelihood's central role to statistical inference, using the language of mathematical statistics to analyze statistical procedures, and using the computer as a tool for understanding statistics. Specific topics include: samples and populations, estimation, hypothesis testing, and theoretical properties of statistical inference.

**Requisites:** (MATH/STAT/MATH 309, STAT 311, MATH/STAT/MATH 431, or MATH 531) and (STAT 240, STAT 301, STAT 302, STAT 324, STAT 371, or ECON 310), or graduate/professional standing

**Course Designation:** Breadth – Natural Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 311 – INTRODUCTION TO THEORY AND METHODS OF MATHEMATICAL STATISTICS I**

3 credits.

Elements of probability, important discrete distributions, acceptance sampling by attributes, sample characteristics, probability distributions and population characteristics, the normal distribution, acceptance sampling plans based on sample means and variances, sampling from the normal, the central limit theorem, point and interval estimation.

**Requisites:** MATH 234, 376, or concurrent enrollment or graduate/professional standing. Not open to students with credit for MATH/STAT/MATH 309 or MATH/STAT/MATH 431

**Course Designation:** Breadth – Natural Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 312 – INTRODUCTION TO THEORY AND METHODS OF MATHEMATICAL STATISTICS II**

3 credits.

Unbiased estimation, maximum likelihood estimation, confidence intervals, tests of hypotheses, Neyman-Pearson lemma, likelihood ratio test, regression, analysis of variance with applications.

**Requisites:** MATH/STAT/MATH 309, STAT 311, MATH/STAT/MATH 431, MATH 531, or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 324 – INTRODUCTORY APPLIED STATISTICS FOR ENGINEERS**

3 credits.

Descriptive statistics, probability concepts and distributions, random variables. Hypothesis tests and confidence intervals for one- and two-sample problems. Linear regression, model checking, and inference. Analysis of variance and basic ideas in experimental design.

**Requisites:** MATH 211, 217, 221, or 275. Not open to students with credit for STAT 302 or 371

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 327 – LEARNING A STATISTICAL LANGUAGE**

1 credit.

Introduction to commonly used statistical languages. (Two such languages commonly used in our Department -- and others -- are R and SAS.)

Modules will be offered at the introductory, intermediate and advanced levels. Repeatable with different titles.

**Requisites:** STAT 301, 302, 324, 371, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2019

**STAT 333 – APPLIED REGRESSION ANALYSIS**

3 credits.

An introduction to regression with emphasis on the practical aspects. Topics include: straight-line model, role of assumptions, residual analysis, transformations, multiple regression (with some use of matrix notation), multicollinearity, subset selection, and a brief introduction to mixed models.

**Requisites:** (STAT 240, 301, 302, 312, 324, or 371) and (STAT 327 or 303, or concurrent enrollment)

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 340 – DATA SCIENCE MODELING II**

4 credits.

Teaches how to apply statistical methods to learn from data. Topics include one- and two-sample inference; an introduction to Bayesian inference and associated probability theory; linear and logistic regression models; the bootstrap; and cross-validation. An integrated statistical computing environment is used to explore and analyze data, develop models, make inferences, and communicate results in a reproducible manner through a project-oriented approach to learning.

**Requisites:** (MATH 211, 217, 221, or 275) and STAT 240

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 349 – INTRODUCTION TO TIME SERIES**

3 credits.

Autocorrelation; stationarity and non-stationarity; heteroscedasticity; dynamic models; auto-regressive and moving average models; identification and fitting; forecasting; seasonal adjustment; applications for financial time series, social sciences and environmental studies.

**Requisites:** STAT 333, 340, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 351 – INTRODUCTORY NONPARAMETRIC STATISTICS**

3 credits.

Distribution free statistical procedures or methods valid under nonrestrictive assumptions: basic tools; counting methods; order statistics, ranks, empirical distribution functions; distribution free tests and associated interval and point estimators; sign test; signed rank tests; rank tests; Mann Whitney Wilcoxon procedures; Kolmogorov Smirnov tests; permutation methods; kernel density estimation; kernel and spline regression estimation; computer techniques and programs; discussion and comparison with parametric methods.

**Requisites:** STAT 333, 340, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 360 – TOPICS IN STATISTICS STUDY ABROAD**

1-3 credits.

Credit is awarded for students having completed an advanced statistics course in a study abroad program for which there is no direct equivalence to the statistics department course offerings. The study abroad course must be pre-approved by the statistics department.

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**STAT 371 – INTRODUCTORY APPLIED STATISTICS FOR THE LIFE SCIENCES**

3 credits.

Introduction to modern statistical practice in the life sciences. Topics include: exploratory data analysis, probability and random variables; one-sample testing and confidence intervals, role of assumptions, sample size determination, two-sample inference; basic ideas in experimental design, analysis of variance, linear regression, goodness-of fit; biological applications.

**Requisites:** (MATH 112 and placed out of MATH 113), (MATH 113 and placed out of MATH 112), (MATH 112 and 113), MATH 114, 171, 211 or 221 or placement in MATH 221. Not open to students with credit for STAT 302 or 324

**Course Designation:** Gen Ed - Quantitative Reasoning Part B  
Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/COMP SCI 403 – INTERNSHIP COURSE IN COMP SCI AND DATA SCIENCE**

1 credit.

Enables students with outside internships to earn academic credit connected to their work experience related to the Computer Sciences or Data Science programs.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, for 3 number of completions

**Last Taught:** Spring 2023

**STAT 405 – DATA SCIENCE COMPUTING PROJECT**

3 credits.

The development of tools necessary for collecting, managing, and analyzing large data sets. Examples of techniques and programs used include Linux, R, distributed computing, text editor(s), git/github, and other related tools. Work in teams to research, develop, write, and make presentations related to a variety of data analysis projects.

**Requisites:** (STAT 240 or 303) and (COMP SCI 200, 220, 300, or placement into COMP SCI 300), or graduate/professional standing

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 411 – AN INTRODUCTION TO SAMPLE SURVEY THEORY AND METHODS**

3 credits.

An introduction to the methods used to design sample surveys and analyze the results. Topics covered include: basic tools, simple random sampling, ratio and regression estimation, stratification, systematic sampling, cluster (area) sampling, two-stage sampling, unequal probability sampling, non-sampling errors, and missing data. For illustration and clarification, examples are drawn from diverse areas of application.

**Requisites:** STAT 333, 340, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**STAT 421 – APPLIED CATEGORICAL DATA ANALYSIS**

3 credits.

Analysis of multidimensional contingency tables, Poisson regression, and logistic regression, with emphasis on practical applications. Use of computer programs for such analyses. Model selection, testing goodness of fit, estimation of parameters, measures of association and methods for detecting sources of significance.

**Requisites:** STAT 333, 340, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT/M E 424 – STATISTICAL EXPERIMENTAL DESIGN**

3 credits.

Introduction to statistical design and analysis of experiments. Topics include: principles of randomization, blocking and replication, randomized blocking designs, Latin square designs, full factorial and fractional factorial designs and response surface methodology. Substantial focus will be devoted to engineering applications.

**Requisites:** STAT 240, 301, 302, 312, 324, 371, or STAT/MATH/STAT 310

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/MATH 431 – INTRODUCTION TO THE THEORY OF PROBABILITY**

3 credits.

Topics covered include axioms of probability, random variables, the most important discrete and continuous probability distributions, expectation and variance, moment generating functions, conditional probability and conditional expectations, multivariate distributions, Markov's and Chebyshev's inequalities, laws of large numbers, and the central limit theorem.

**Requisites:** MATH 234 or 376 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 433 – DATA SCIENCE WITH R**

3 credits.

Perform Data Science as an iterative (back and forth) process of four different types of activities (data collection, data wrangling, data analysis, communication). Traverse through the five requisite stances (scientist, coder, mathematician, methodologist, skeptic). Develop and hone a broad set of computational tools in R (but not the broadest) and a broad set of statistical/machine learning tools (but not the broadest). Focus on doing these with agility to make the coding "transparent" and serve the large goals of the project.

**Requisites:** (STAT 333 or 340) and (MATH 320, 340, 341, or 375), graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 436 – STATISTICAL DATA VISUALIZATION**

3 credits.

Techniques for visualization within data science workflows. Topics include data preparation; exploratory data analysis; spatial, tabular, and graph structured data; dimensionality reduction; model visualization and interpretability; interactive queries and navigation.

**Requisites:** (STAT 240 or 303), graduate professional/standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 443 – CLASSIFICATION AND REGRESSION TREES**

3 credits.

Introduction to algorithms and applications of classification and regression trees. Recursive partitioning, pruning, and cross-validation estimation of prediction error. Class priors and misclassification costs. Univariate and linear splits. Linear and kernel discriminant analysis and nearest-neighbor classification. Unbiased variable selection and importance scoring of variables. Least-squares, quantile, Poisson, logistic, and proportional hazards regression tree models. Tree ensembles. Subgroup identification of differential treatment effects. Multiple and longitudinal response variables. Missing values and multiple missing value codes. Comparisons with neural networks, support vector machines, and other methods. Bootstrap calibration and post-selection inference. Applications to business, social science, engineering, biology, medicine, and other fields.

**Requisites:** STAT 333, 340, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Either Social Science or Natural Science

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 451 – INTRODUCTION TO MACHINE LEARNING AND STATISTICAL PATTERN CLASSIFICATION**

3 credits.

Introduction to machine learning for pattern classification, regression analysis, clustering, and dimensionality reduction. For each category, fundamental algorithms, as well as selections of contemporary, current state-of-the-art algorithms, are being discussed. The evaluation of machine learning models using statistical methods is a particular focus of this course. Statistical pattern classification approaches, including maximum likelihood estimation and Bayesian decision theory, are compared and contrasted to algorithmic and nonparametric approaches. While fundamental mathematical concepts underlying machine learning and pattern classification algorithms are being taught, the practical use of machine learning algorithms using open source libraries from the Python programming ecosystem will be of equal focus in this course.

**Requisites:** MATH 320, 321, 340, 341, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### STAT 453 – INTRODUCTION TO DEEP LEARNING AND GENERATIVE MODELS

3 credits.

Deep learning is a field that specializes in discovering and extracting intricate structures in large, unstructured datasets for parameterizing artificial neural networks with many layers. Since deep learning has pushed the state-of-the-art in many research and application areas, it's become indispensable for modern technology. Focuses on a understanding deep, artificial neural networks by connecting it to related concepts in statistics. Beyond covering deep learning models for predictive modeling, focus on deep generative models. Besides explanations on a mathematical and conceptual level, emphasize the practical aspects of deep learning. Open-source computing provides hands-on experience for implementing deep neural nets, working on supervised learning tasks, and applying generative models for dataset synthesis.

**Requisites:** MATH 320, 321, 340, 341, graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### STAT 456 – APPLIED MULTIVARIATE ANALYSIS

3 credits.

Theory and applications of multivariate statistical methods. Basic concepts and statistical reasoning which underlie the techniques of multivariate analysis. Ideas rather than derivations stressed although basic models discussed to give the student some feeling for their adequacy in particular situations. Acquaintance with and use of existing computer programs in the multivariate analysis area.

**Requisites:** (STAT 333 or 340) and (MATH 320, 340, 341, or 375), graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### STAT 461 – FINANCIAL STATISTICS

3 credits.

Stochastic models and statistical methodologies are widely employed in modern finance. The models and their inferences are very important for academic research and financial practices. This course will cover the financial stochastic models and their statistical inferences with applications to volatility analysis and risk management. It will introduce discrete models such as binomial trees and GARCH and stochastic volatility models as well as simple continuous models like the Black-Scholes model. The main focus of the course will be on statistical inference, data analysis and risk management regarding these models.

**Requisites:** (STAT 333 or 340 or ECON 410) and (STAT/MATH/STAT 309, STAT 311, or STAT/MATH/STAT 431), graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### STAT/COMP SCI 471 – INTRODUCTION TO COMPUTATIONAL STATISTICS

3 credits.

Classical statistical procedures arise where closed-form mathematical expressions are available for various inference summaries (e.g. linear regression; analysis of variance). A major emphasis of modern statistics is the development of inference principles in cases where both more complex data structures are involved and where more elaborate computations are required. Topics from numerical linear algebra, optimization, Monte Carlo (including Markov chain Monte Carlo), and graph theory are developed, especially as they relate to statistical inference (e.g., bootstrapping, permutation, Bayesian inference, EM algorithm, multivariate analysis).

**Requisites:** MATH/STAT/MATH 310 and (STAT 333 or 340), graduate/professional standing, or declared in Statistics VISP

**Course Designation:** Breadth - Natural Science  
Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### STAT/COMP SCI/MATH 475 – INTRODUCTION TO COMBINATORICS

3 credits.

Problems of enumeration, distribution, and arrangement. Inclusion-exclusion principle. Generating functions and linear recurrence relations. Combinatorial identities. Graph coloring problems. Finite designs. Systems of distinct representatives and matching problems in graphs. Potential applications in the social, biological, and physical sciences. Puzzles. Problem solving.

**Requisites:** (MATH 320, 340, 341, or 375) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science  
Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### STAT 479 – SPECIAL TOPICS IN STATISTICS

1-3 credits.

Special topics of interest in undergraduate students.

**Requisites:** None

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**STAT/COMP SCI/ISYE/MATH 525 – LINEAR OPTIMIZATION**

3 credits.

Introduces optimization problems whose constraints are expressed by linear inequalities. Develops geometric and algebraic insights into the structure of the problem, with an emphasis on formal proofs. Presents the theory behind the simplex method, the main algorithm used to solve linear optimization problems. Explores duality theory and theorems of the alternatives.

**Requisites:** MATH 320, 340, 341, 375, or 443 or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/B M I 541 – INTRODUCTION TO BIOSTATISTICS**

3 credits.

Course designed for the biomedical researcher. Topics include: descriptive statistics, hypothesis testing, estimation, confidence intervals, t-tests, chi-squared tests, analysis of variance, linear regression, correlation, nonparametric tests, survival analysis and odds ratio. Biomedical applications used for each topic.

**Requisites:** Graduate/professional standing. Not open to students with credit for B M I/STAT 511 or B M I/POP HLTH/B M I 551

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT/B M I 542 – INTRODUCTION TO CLINICAL TRIALS I**

3 credits.

Intended for biomedical researchers interested in the design and analysis of clinical trials. Topics include definition of hypotheses, measures of effectiveness, sample size, randomization, data collection and monitoring, and issues in statistical analysis. Statistics graduate students should take B M I/STAT 641.

**Requisites:** STAT/B M I/STAT 541

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/F&W ECOL/HORT 571 – STATISTICAL METHODS FOR BIOSCIENCE I**

4 credits.

Descriptive statistics, distributions, one- and two-sample normal inference, power, one-way ANOVA, simple linear regression, categorical data, non-parametric methods; underlying assumptions and diagnostic work.

**Requisites:** Graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT/F&W ECOL/HORT 572 – STATISTICAL METHODS FOR BIOSCIENCE II**

4 credits.

Polynomial regression, multiple regression, two-way ANOVA with and without interaction, split-plot design, subsampling, analysis of covariance, elementary sampling, introduction to bioassay.

**Requisites:** FW ECOL/HORT/STAT/F&W ECOL/HORT 571

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 575 – STATISTICAL METHODS FOR SPATIAL DATA**

3 credits.

Detecting and quantifying spatial patterns and modeling in the presence of such patterns. Spatial Point Patterns: testing nonrandomness, simulating and characterizing patterns. Lattice Data: spatial autocorrelation and regression. Geostatistics: variograms, ordinary and universal kriging, inference, assessing assumptions, and extensions.

**Requisites:** (STAT 333 or 340) and STAT/M E/STAT 424; or STAT/FW ECOL/HORT/F&W ECOL/STAT 572

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015



**STAT 601 – STATISTICAL METHODS I**

4 credits.

Provides a thorough grounding in modern statistical methods. The specific learning outcomes for the course are to understand data collection in context (how/why data were collected, key questions under study); explore data by effective graphical and numerical summaries; understand probability concepts and models as tools for studying random phenomena and for statistical inference; analyze data using appropriate, modern statistical models, methods, and software; understand the statistical concepts underlying methods; develop the ability to interpret results and critically evaluate the methods used; communicate data analysis and key findings in context.

**Requisites:** Graduate/professional standing or member of the Statistics Visiting International program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 602 – STATISTICAL METHODS II**

4 credits.

Provides a thorough grounding in modern statistical methods. The specific learning outcomes for the course are to understand data collection in context (how/why data were collected, key questions under study); explore data by effective graphical and numerical summaries; understand probability concepts and models as tools for studying random phenomena and for statistical inference; analyze data using appropriate, modern statistical models, methods, and software; understand the statistical concepts underlying methods; develop the ability to interpret results and critically evaluate the methods used; communicate data analysis and key findings in context.

**Requisites:** STAT 601

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**STAT 605 – DATA SCIENCE COMPUTING PROJECT**

3 credits.

The development of tools necessary for collecting, managing, and analyzing large data sets. Examples of techniques and programs utilized include Linux, R, distributed computing, powerful editor(s), git/github, and other related tools. Work in the class will be done in teams to research, develop, write, and make presentations related to a variety of data analysis projects. Knowledge of R equivalent to STAT 303, 304, and 305.

**Requisites:** Enrolled in Statistics MS or Statistics Visiting International Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 606 – COMPUTING IN DATA SCIENCE AND STATISTICS**

3 credits.

A survey of some of the tools and frameworks that are currently popular among data scientists and statisticians working in both academia and industry. Begins with an accelerated introduction to the Python programming language and brief introductions to object-oriented and functional programming. Covers some of the scientific computing platforms available in Python, including tools for numerical and scientific computing; training basic machine learning models; and data visualization. Discusses collecting data from the web both by scraping and using APIs. Concludes with a brief survey of distributed computing platforms, focusing on the MapReduce framework.

**Requisites:** Declared in Statistics MS or Statistics VISP (undergraduate)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 609 – MATHEMATICAL STATISTICS I**

3 credits.

Review of probability, random variables and vectors and their distributions, moments and inequalities, generating functions, transformations of random variables, sampling and distribution theory, convergence concepts for sequences of random variables, laws of large numbers, central limit and other limit theorems.

**Requisites:** Graduate/professional standing or member of the Statistics Visiting International program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**STAT 610 – INTRODUCTION TO STATISTICAL INFERENCE**

4 credits.

Conditioning, distribution theory, approximation to distributions, modes of convergence, limit theorems, statistical models, parameter estimation, comparison of estimators, confidence sets, theory of hypothesis tests, introduction to Bayesian inference and nonparametric estimation.

**Requisites:** Graduate/professional standing or member of the Statistics Visiting International program

**Course Designation:** Breadth - Physical Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 611 – STATISTICAL MODELS FOR DATA SCIENCE**

3 credits.

Probability, random variables and their distributions, joint and conditional distributions, moments and inequalities, generating functions, transformations of random variables, sampling and distribution theory, convergence concepts and limit theorems for sequences of random variables.

**Requisites:** Declared in Data Science MS or Data Engineering MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**STAT 612 – STATISTICAL INFERENCE FOR DATA SCIENCE**

3 credits.

Statistical models, methods and theory for parameter estimation, Bayesian approach to parameter estimation, methods and theory for hypothesis tests, confidence sets, two-sample testing and ANOVA, categorical data analysis, linear regression.

**Requisites:** STAT 611

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**STAT 613 – STATISTICAL METHODS FOR DATA SCIENCE**

3 credits.

Provides a thorough grounding in modern statistical methods. Introduces statistical techniques and methods of data analysis, including data description, linear regression models, diagnostic tools, prediction and model selection, and experimental design.

**Requisites:** Declared in Data Science MS or Data Engineering MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**STAT 615 – STATISTICAL LEARNING**

3 credits.

The development of a variety of mathematical theories and statistical concepts (1) to understand the properties of those models and methods used for the purpose of prediction from data or decision making from data, and (2) to criticize such models, methods and their consequences. Specifically, the theories and tools that will be developed will include complexity theory, Hilbert spaces, Gaussian processes, Variational Analysis, and concentration inequalities.

**Requisites:** Declared in Statistics or Biometry graduate programs, or Statistics Visiting International Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 627 – PROFESSIONAL SKILLS IN DATA SCIENCE**

1-3 credits.

Covers important aspects of professional development in statistics, including skills with internet tools, sophisticated use of statistical languages (such as R) and other emerging topics.

**Requisites:** Graduate/professional standing or member of the Statistics Visiting International program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**STAT 628 – DATA SCIENCE PRACTICUM**

1-3 credits.

Provides an understanding of and experience with turning statistics concepts into practice through data science practicums inspired by realistic projects. Students will combine theory and methods expertise with communications skills to translate from a vaguely stated project description and complex data set into a concisely summarized analysis, including both written and graphical interpretation that can be used by decision makers in an organization. Graduate student in Statistics

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**STAT/ISYE/MATH/OTM 632 – INTRODUCTION TO STOCHASTIC PROCESSES**

3 credits.

Topics include discrete-time Markov chains, Poisson point processes, continuous-time Markov chains, and renewal processes. Applications to queueing, branching, and other models in science, engineering and business.

**Requisites:** (MATH/STAT/MATH 431, 309, STAT 311 or MATH 531) and (MATH 320, 340, 341, 375, 421 or 531) or graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Breadth - Natural Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/BMI 641 – STATISTICAL METHODS FOR CLINICAL TRIALS**

3 credits.

Statistical issues in the design of clinical trials, basic survival analysis, data collection and sequential monitoring. Intended for statistics graduate students; those with medical backgrounds should take STAT/BMI 542.

**Requisites:** MATH/STAT/MATH 310 or graduate/professional standing

**Course Designation:** Breadth - Natural Science Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT/B M I 642 – STATISTICAL METHODS FOR EPIDEMIOLOGY**

3 credits.

Methods for analysis of case-control, cross sectional, and cohort studies. Covers epidemiologic study design, measures of association, rates, classical contingency table methods, and logistic and Poisson regression.

**Requisites:** MATH/STAT/MATH 310 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 678 – INTRODUCTION TO STATISTICAL CONSULTING**

3 credits.

Develop statistical consulting skills to be able to communicate design and analysis to non-technical research collaborators. Provides a supportive environment to experiment with statistical consulting in practice, which will sometimes be uncomfortable and strange. Consulting problems typically do not have a "right" answer, and mistakes are encouraged. Take risks in sharing developing ideas in class. Connections with external organizations, such as the private sector and government agencies, will be made through possible internship experiences.

**Requisites:** Declared in Statistics MS

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 679 – SPECIAL TOPICS IN STATISTICS**

1-3 credits.

Special topics in statistics at the master's level. Subject matter varies.

**Requisites:** Graduate/professional standing or member of the Statistics Visiting International program

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**STAT 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study for students writing honors thesis, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study for students writing honors thesis, as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 698 – DIRECTED STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**STAT 699 – DIRECTED STUDY**

1-6 credits.

Directed study projects as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**STAT 701 – APPLIED TIME SERIES ANALYSIS, FORECASTING AND CONTROL I**

3 credits.

Theory and application of discrete time series models illustrated with forecasting problems. Principles of iterative model building. Representation of dynamic relations by difference equations. Autoregressive integrated Moving Average models. Identification, fitting, diagnostic checking of models. Seasonal model application to forecasting in business, economics, ecology, and engineering used at each stage, which the student analyzes using computer programs which have been specially written and extensively tested.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**STAT/MATH 709 – MATHEMATICAL STATISTICS**

4 credits.

Introduction to measure theoretic probability; derivation and transformation of probability distributions; generating functions and characteristic functions; conditional expectation, sufficiency, and unbiased estimation; methods of large sample theory including laws of large numbers and central limit theorems; order statistics.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**STAT/MATH 710 – MATHEMATICAL STATISTICS**

4 credits.

Estimation, efficiency, Neyman-Pearson theory of hypothesis testing, confidence regions, decision theory, analysis of variance, and distribution of quadratic forms.

**Requisites:** MATH/STAT/MATH 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**STAT/COMP SCI/ISY E/MATH 726 – NONLINEAR OPTIMIZATION I**

3 credits.

Theory and algorithms for nonlinear optimization, focusing on unconstrained optimization. Line-search and trust-region methods; quasi-Newton methods; conjugate-gradient and limited-memory methods for large-scale problems; derivative-free optimization; algorithms for least-squares problems and nonlinear equations; gradient projection algorithms for bound-constrained problems; and simple penalty methods for nonlinearly constrained optimization. Students are strongly encouraged to have knowledge of linear algebra and familiarity with basic mathematical analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**STAT/B M I 727 – THEORY AND METHODS OF LONGITUDINAL DATA ANALYSIS**

3 credits.

Theory and methods of fundamental statistical models for the analysis of longitudinal data, including repeated measures analysis of variance, linear mixed models, generalized linear mixed models, and generalized estimating equations. Introduction of how to implement these methods in statistical softwares such as in R and/or SAS, within the context of appropriate statistical models and carry out and interpret analyses.

**Requisites:** STAT 610**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**STAT 732 – LARGE SAMPLE THEORY OF STATISTICAL INFERENCE**

3 credits.

Stochastic modes of convergence. Asymptotic theory of normed sums of random variables with applications to asymptotic normality of estimators. Methods for deriving limit distributions of nonlinear statistics. Asymptotic relative efficiencies. Asymptotic confidence regions and tests of hypotheses. Models of non-identically distributed or dependent random variables.

**Requisites:** STAT 610 or STAT/MATH/STAT 709**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2020**STAT/MATH 733 – THEORY OF PROBABILITY I**

3 credits.

An introduction to measure theoretic probability and stochastic processes. Topics include foundations, independence, zero-one laws, laws of large numbers, convergence in distribution, characteristic functions, central limit theorems, random walks, conditional expectations. Familiarity with basic measure theory (e.g. MATH 629 or 721) or concurrent registration in MATH 721 is strongly recommended.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**STAT/MATH 734 – THEORY OF PROBABILITY II**

3 credits.

Continuation of MATH/STAT 733. Possible topics include martingales, weak convergence of measures, introduction to Brownian motion.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**STAT/B M I 741 – SURVIVAL ANALYSIS THEORY AND METHODS**

3 credits.

Theory and practice of analytic methods for censored survival data, including nonparametric and parametric methods, the proportional hazards regression model, and a review of current topics in survival analysis.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

**STAT 760 – MULTIVARIATE ANALYSIS I**

3 credits.

Multivariate normal distribution, estimation of mean and covariance matrix; Wishart distribution; distribution of partial and multiple correlation coefficients; Hotelling's T-squared, principal components.

**Requisites:** STAT 610 or STAT/MATH/STAT 710

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**STAT 761 – DECISION TREES FOR MULTIVARIATE ANALYSIS**

3 credits.

Tree construction, including finding splits, tree-pruning and error estimation. Categorical predictor variables, missing or censored data, prior class-probabilities, and unequal misclassification costs. Selection bias. Comparison with other statistics and machine-learning methods. Extensions to piecewise linear and non-least squares regression models.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**STAT/B M I 768 – STATISTICAL METHODS FOR MEDICAL IMAGE ANALYSIS**

3 credits.

Introduce key statistical methods and concepts for analyzing various medical images. Analyze publicly available and student/instructor supplied imaging data using the most up-to-date methods and tools. Aimed at graduate student and researchers with strong quantitative background.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT 771 – STATISTICAL COMPUTING**

3 credits.

The design of statistical software including special techniques for probability distributions, methods of simulation of random processes, numerical methods for linear models and multivariate analysis, and methods for nonlinear models.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 772 – LINEAR RANDOMIZED ALGORITHMS FOR DATA SCIENCE**

3 credits.

Introduce new algorithms that leverage randomization to address the scale, speed, and sensitivity needs of modern data science. Develop the mathematical foundations of such randomized algorithms. Criticize these algorithms through the lens of computational resource utilization. Implement these algorithms to address linear problems in data science.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**STAT/ECON/GEN BUS 775 – INTRODUCTION TO BAYESIAN DECISION AND CONTROL I**

3 credits.

Common sampling models in business and economic problems, information from data, likelihood function of parameters, choices of models, Bayes' Theorem, subjective basis for probability, sequential nature of Bayesian inference, prior and posterior distributions of parameters in binomial, poisson, exponential and normal populations, comparison of two normal distributions, predictive distributions, decision theory, utility, risk aversion, extensive form of analysis, two-action problems, point estimation, best population problems, economics of sampling.

**Requisites:** STAT 609 or MATH/STAT/MATH 709

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**STAT 801 – ADVANCED FINANCIAL STATISTICS**

3 credits.

Statistical theory and methodology for modern financial data. Topics include financial stochastic models based on time series and stochastic calculus, modern statistical inference, and statistical learning for financial data as well as their applications to financial problems.

**Requisites:** STAT 601 or 701

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**STAT/MATH 803 – EXPERIMENTAL DESIGN I**

3 credits.

Summary of matrix algebra required, theory of estimable functions, incomplete blocks, balanced incomplete block designs, partially balanced incomplete block designs.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**STAT 809 – NON PARAMETRIC STATISTICS**

3 credits.

Statistical procedures valid under unrestrictive assumptions; sign test; confidence intervals; efficiency comparisons; signed rank procedures; Walsh sums; point estimators; two sample rank tests; zeros, ties, and other problems of discrete data; order statistics; Winsorized and truncated point estimators and connection with gross error models; permutation procedures; combinatorial problems, and computer applications.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**STAT 811 – SAMPLE SURVEY THEORY AND METHOD**

3 credits.

Simple random sampling; systematic sampling; probability sampling; stratified sampling; subsampling with units of equal and unequal size; double sampling; multi-stage and multi-phase sampling; ratio and regression estimates; model-based and model-assisted approaches; variance estimation; non-response.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2017**STAT/MATH 833 – TOPICS IN THE THEORY OF PROBABILITY**

3 credits.

Advanced topics in probability and stochastic processes.

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**STAT 834 – EMPIRICAL PROCESSES AND SEMIPARAMETRIC INFERENCE**

1-3 credits.

Empirical process methods in statistics; semiparametric models; stochastic convergence in metric spaces; Glivenko-Cantelli and Donsker theorems; entropy calculations; bootstrapped empirical processes; functional delta method; Z-estimators; M-estimators; rates of convergence; semiparametric efficiency; semiparametric estimating equations; nonparametric maximum likelihood.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2019**STAT 840 – STATISTICAL MODEL BUILDING AND LEARNING**

3 credits.

Theory of reproducing kernel Hilbert spaces in statistical model building; bounded linear functionals and representer theory; smoothing splines; ANOVA spines; degrees of freedom for signal and the bias-variance tradeoff; Bayesian confidence intervals; model selection.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2015**STAT 841 – NONPARAMETRIC STATISTICS AND MACHINE LEARNING METHODS**

3 credits.

Statistical function estimation and classification; reproducing kernel machines, support vector machines; high dimensional model selection and estimation; Bayesian, empirical Bayesian interpretation of nonparametric learning methods; log density ANOVA and graphical models; tree ensemble methods including bagging, boosting, and random forest.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2019**STAT 849 – THEORY AND APPLICATION OF REGRESSION AND ANALYSIS OF VARIANCE I**

3 credits.

Theory and applications of the general linear model; graphical methods; simultaneous inference; regression diagnostics; analysis of variance of fixed, random and mixed effects models; ANCOVA: violations of assumptions.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**STAT 850 – THEORY AND APPLICATION OF REGRESSION AND ANALYSIS OF VARIANCE II**

3 credits.

Theory and applications of the general linear model; graphical methods; simultaneous inference; regression diagnostics; analysis of variance of fixed, random and mixed effects models; ANCOVA: violations of assumptions.

**Requisites:** STAT 849**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023



**STAT 860 – ESTIMATION OF FUNCTIONS FROM DATA**

3 credits.

Statistical and approximation theoretic methods of estimating functions and values of functionals from experimental data; experimental design and data analysis problems that arise as problems in approximation theory; convergence theorems; ill-posed inverse problems; Banach and Hilbert space penalty functionals.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2016**STAT/COMP SCI/E C E 861 – THEORETICAL FOUNDATIONS OF MACHINE LEARNING**

3 credits.

Advanced mathematical theory and methods of machine learning. Statistical learning theory, Vapnik-Chevronenkis Theory, model selection, high-dimensional models, nonparametric methods, probabilistic analysis, optimization, learning paradigms.

**Requisites:** COMP SCI/E C E/COMP SCI 761 or E C E 830**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**STAT/B M I 877 – STATISTICAL METHODS FOR MOLECULAR BIOLOGY**

3 credits.

Develop statistical problems in gene mapping, high throughput -omics data analysis, phylogenetics and sequence analysis. Introduce ideas of key methods using published data. Statisticians learn statistical basis for research methodology. Collaboration among students and with biologists is encouraged through projects.

**Requisites:** STAT 610 or STAT/MATH/STAT 710**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**STAT/E C E/MATH 888 – TOPICS IN MATHEMATICAL DATA SCIENCE**

1-3 credits.

Advanced topics in the mathematical foundations of data science

**Requisites:** Graduate/professional standing or member of the Pre-Masters Mathematics (Visiting International) Program**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**STAT 990 – RESEARCH**

1-12 credits.

Independent research and writing for graduate students under the supervision of a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**STAT 992 – SEMINAR**

1-3 credits.

Special topics in statistics at the graduate level. Subject matter varies.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**STAT 998 – STATISTICAL CONSULTING**

3 credits.

Consulting apprenticeship.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

## SURGERY (SURGERY)

**SURGERY 699 – INDEPENDENT STUDY**

0-5 credits.

Independent study projects as arranged with faculty or instructional staff.

**Requisites:** Consent of instructor**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 910 – INDEPENDENT READING AND RESEARCH IN SURGERY**

2-8 credits.

Independent research under the direct supervision of Surgery, Orthopedics, or Urology faculty. Projects are individualized to meet research goals within the context of faculty research needs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**SURGERY 911 – AORTIC DISEASE FROM BENCH TO BEDSIDE**

2 credits.

The basics of vascular biology, as it applies to abdominal aortic aneurysm disease. Gain an understanding of pathophysiology of aneurysm disease, animal models of aortic aneurysm, and knowledge on experimental approaches to develop biomarkers and therapeutic strategies. Experience medical treatment of aneurysm disease in the clinic, and how risk factors identified from basic science techniques are applied at the bedside.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURGERY 912 – AORTIC DISEASE FROM BENCH TO BOARDROOM**

2 credits.

The anatomy applicable to abdominal aortic aneurysm repair, how this influenced the development of endografts, and how that development is regulated. Investigate the issues involved in aneurysm screening, and experience aneurysm screening in the clinic and aneurysm repair in the operating room. Discuss what is involved in medical device regulation, and how the medical device industry interacts with physicians to develop and distribute technology. Evaluate how the cost of medical devices is distributed to patients.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SURGERY 919 – INDIVIDUALIZED PHASE 3 CLINICAL ELECTIVE IN SURGERY**

2-4 credits.

Care for hospitalized patients on general surgery or surgical specialty services. Admit new patients, round on previously admitted patients, participate in multidisciplinary rounds, and work to transition patients to the next level of care. Evaluate and manage patient with both common inpatient conditions and medically complex patients requiring collaboration with consulting specialties. Direct supervision by house staff and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Complete other patient care related learning activities as assigned by instructors.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURGERY 920 – GENERAL SURGERY ELECTIVE**

2-4 credits.

Direct supervision by General Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURGERY 938 – INPATIENT ACTING INTERNSHIP-SURGERY**

4 credits.

Provides an in-depth exposure to inpatient and operative management of complicated surgical patients. Work under the direct supervision of a senior resident, fellows and faculty. This rotation will provides an opportunity to function at the intern level and play an active role in inpatient management of surgical patients.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURGERY 939 – ADULT ORTHOPEDICS FOR THE FUTURE ORTHOPEDIST ELECTIVE**

2-4 credits.

Direct supervision by orthopedic Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Present a case of interest based on involvement in and a brief literature review on the treatment or condition. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURGERY 940 – ADULT ORTHOPEDICS FOR THE NON-ORTHOPEDIST ELECTIVE**

2-4 credits.

Direct supervision by community orthopedic senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 944 – UPPER EXTREMITY ORTHOPAEDIC CLERKSHIP-MARSHFIELD CLINIC**

2-12 credits.

Clinical elective for fourth year medical students.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2021**SURGERY 948 – OTOLARYNGOLOGY ELECTIVE**

2-4 credits.

Direct supervision by Otolaryngology senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 954 – PERIPHERAL VASCULAR ELECTIVE**

2-4 credits.

Direct supervision by Peripheral Vascular Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 956 – PLASTIC AND RECONSTRUCTIVE SURGERY ELECTIVE**

2-4 credits.

Direct supervision by Plastic Surgery senior residents and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 960 – TRANSPLANTATION ELECTIVE**

2-4 credits.

Direct supervision by Transplant fellows and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023

**SURGERY 962 – SURGICAL CRITICAL CARE ELECTIVE**

2-4 credits.

Direct supervision by General Surgery senior residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 963 – CARDIOTHORACIC SURGERY ELECTIVE**

2-4 credits.

Direct supervision by Cardiothoracic fellows and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned general surgery service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 967 – UROLOGY ELECTIVE**

2-4 credits.

Direct supervision by Urology residents, fellows, and attending physicians. Participate in regularly scheduled supervisor-student meetings, which involve some or all of the following: rounding on service patients, participating in scheduled operative procedures, presenting cases and teaching topics, and discussing patient cases. Complete independent activities including some or all of the following: reading about patient conditions and preparing for direct patient care as needed. Attend conferences associated with the assigned Urology service. Complete other patient care related learning activities as assigned by instructors; these are dependent on the individual student, the patients under the student's care, and the location.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**SURGERY 973 – OPTIMIZING VALUE, QUALITY AND SAFETY IN HEALTHCARE**

2 credits.

An in-depth understanding of the key concepts of value, quality and safety is critical to the education of future physicians. The majority of adverse events experienced by hospitalized patients occur in surgery. Surgery offers the ideal setting to explore these three components critical to improving the US healthcare system. Examine factors that influence the care we provide and critically consider the value of this care. Observe efforts to improve value in surgery focusing on quality, safety and appropriate utilization of critical resources and consider areas for improvement. Follow patients in all processes of care from clinic, to the operating room, through their postoperative course, to discharge, and consider how important measures to secure safety and quality are encountered and impact care in the clinical arena. Consider price and allocation of scarce resources. Gather information for their analysis of the patient experience.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**SURGERY 974 – PATIENT EDUCATION AS A STRATEGY FOR ADVOCACY**

2 credits.

Develop knowledge of how people learn, adult learning principles, and how these apply to medicine. Learn and practice effective interpersonal communication techniques. Reflect on your own strategies for communicating with patients, and develop and implement a plan to improve your communication with patients. Effective communication and patient education allows physicians to act as advocates for their patients. Discuss barriers to patient education, and strategies to mitigate those barriers. Gain insight into communication and education strategies for patients with communication issues.

**Requisites:** MED SC-M 810, 811, 812, and 813**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023

### **SURGERY 975 – MULTIDISCIPLINARY APPROACHES TO COLON CANCER PREVENTION/TREATMENT**

2 credits.

Explore the reasons behind failure of colorectal cancer screening programs. Learn the standard of care for prevention, diagnosis, and treatment of colorectal cancer. Focus on all facets of the disease, with active engagement in dialogue to improve screening programs for colorectal cancer. Learn to identify methods to improve medical care and population health. Explore background studies to integrate emerging information on individual's biologic and genetic risk with population-level factors when deciding upon prevention and treatment options. Work with the various members of the healthcare team involved in treating colorectal cancer and educate the public on the importance of colorectal cancer screening.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SURGERY 976 – THE SCIENCE OF OBESITY AND DIABETES**

2 credits.

The science of diabetes and obesity as it correlates to the clinical setting. The history of endocrinology and discovery of insulin will provide the basis for understanding hormonal mechanisms controlling fuel metabolism and how these processes become dysfunctional in different disease states. Topics will include pancreatic and extrapancreatic control of metabolism, and diseases linked with obesity, including PCOS, type 2 diabetes, and cancer. Lifestyle, medical, and surgical treatments of obesity and diabetes, including pharmacologic mechanisms of insulin and non-insulin diabetes therapeutics and bariatric surgery, will be highlighted. The public health perspective will shine light on societal factors that influence obesity and diabetes care. Provides an advanced scientific foundation with which to approach evidence-based care and treatment of individuals with obesity and/or diabetes.

**Requisites:** MED SC-M 810, 811, 812, and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SURGERY 977 – INJURY AND VIOLENCE PREVENTION**

4 credits.

The concept of injury prevention is inherently challenging, despite the systemic global public health problem of violence and injuries. Provides a foundation to approach injury prevention and control. Incorporates curriculum from TEACH-VIP (Training, Educating, and Advancing Collaboration in Health on Violence and Injury Prevention).

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **SURGERY 978 – SOMETHING'S WRONG WITH MY BUTT!: COMMON ANORECTAL DISEASES**

2 credits.

The diagnosis and treatment of common anorectal diseases in the context of anatomical and physiological basis as it correlates to the clinical setting. The medical and surgical treatment of anorectal disorders will be discussed from the historical background to modern management algorithms. Topics will include fissures, perirectal abscess, fistula-in-ano, external and internal hemorrhoidal diseases, pruritus ani, fecal incontinence, rectal prolapse, obstructive defecation, sexually transmitted infections, and various anorectal manifestations of irritable bowel disease. Symptomatic presentation and natural progression of each of these disease processes will be discussed. Provide a sound scientific foundation with which to approach evidence-based diagnosis, triage, and treatment of patients with acute versus chronic anorectal disorders.

**Requisites:** MED SC-M 810, 811, 812, AND 813 and Grad or Professional student

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SURGERY 979 – INTRODUCTION TO CLINICAL INFORMATICS**

2 credits.

Clinical Informatics is the study of how to capture, organize, and process information with the purpose of improving the health of individuals and populations. Today, one of the primary mechanisms of managing health information is via the electronic health record (EHR). Introduction to the real-world, practical application of Clinical Informatics principles, through focused study and hands-on immersion into the physician informatics team meetings and tasks. Specific topics include population health informatics, clinical decision support, and human computer interaction.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **SURGERY 980 – SEX, GENDER, AND SEXUALITY HEALTH EQUITY**

2 credits.

An overview of how concepts of sex, gender, and sexuality in society and medicine impact medical care and lived experience for patients who are LGBTQ, transgender, gender-diverse and/or have variations in sex characteristics (VSC). Topics include shared decision-making, allyship, trauma-informed care, gender-affirming care, and unique health disparities in patients who are LGBTQ, transgender, gender-diverse and/or those with VSC. Gain insight into patient experience of medical care through patient-centered shadowing/observer opportunities.

**Requisites:** MED SCI-M 810, 811, 812 and 813

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**SURGERY 981 – MINDFULNESS TRAINING FOR RESIDENCY**

1 credit.

Gain familiarity with Mindfulness-Based Stress Reduction interventions that have been shown to increase physician well-being and build resiliency. Cultivate non-judgmental and calm awareness of the present moment. Learn and practice formal and informal mindfulness meditation practices. Research mindfulness skills and their benefits to physicians. Understand guided mindful activities. Adapt individualized mindfulness techniques.

**Requisites:** Declared in Doctor of Medicine program with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

## SURGICAL SCIENCES (SURG SCI)

**SURG SCI 501 – RADIOGRAPHIC ANATOMY OF THE DOG AND CAT**

1 credit.

Normal radiographic anatomy of the dog and cat. This will include soft tissue structures as well as the skeletal system. Clinical case material to emphasize the need for a thorough knowledge of normal radiographic anatomy.

**Requisites:** Declared in Doctor of Veterinary Medicine with first year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**SURG SCI 542 – VETERINARY OPHTHALMOLOGY**

2 credits.

Provides basic instruction in the application of ophthalmic diagnostics and therapeutics to small and large domestic animals. Acquire skills and knowledge to accurately diagnose, treat, prognose or refer domestic animals with common ophthalmic disorders.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 543 – FUNDAMENTALS OF ANESTHESIOLOGY I**

1 credit.

Covers basic principles of sedation, pain physiology, anesthetic drugs, anesthetic monitoring, and the practical considerations in performing anesthesia on healthy veterinary species. Case-based and interactive where appropriate.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 544 – SURGERY FUNDAMENTALS**

2 credits.

Introductory material on the scientific foundations of surgery. Preparation for clinical work in veterinary surgery and medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with second year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 545 – FUNDAMENTALS OF ANESTHESIOLOGY II**

1 credit.

Focus on anesthetic management of common veterinary species with concurrent medical disease. Covers advanced pain management principles and techniques, anesthesia for exotic animal species, and breed considerations in anesthesia. Case-based and interactive where appropriate.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI/F&W ECOL 548 – DISEASES OF WILDLIFE**

3 credits.

Provides an overview of the issues involved across a wide range of wildlife diseases, presented within the context of ecosystem health or "one health". Content will be on the biological, epidemiological, clinical, public health and, in some cases, sociopolitical ramifications of wildlife diseases. Covers a wide variety of wildlife diseases caused by bacteria, viruses, parasites, prions, and environmental contaminants. Consequences associated with environmental changes on the manifestation of wildlife diseases will also be discussed. This range of diseases will be presented in order to familiarize the many facets involved in disease management, from animal and human health issues, to ecological and environmental considerations, to the role of society in contributing to, and managing, these diseases.

**Requisites:** BOTANY/BIOLOGY 130, (ZOOLOGY/BIOLOGY 101 102), BIOLOGY/BOTANY/ZOOLOGY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**SURG SCI 630 – SMALL ANIMAL SURGERY**

4 credits.

The pathophysiology and diagnosis of common general, orthopedic, and neurologic surgical diseases of small animals are presented. The operative management and postoperative care of small animal surgical patients are discussed in detail.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



**SURG SCI 631 – LARGE ANIMAL SURGERY: ORTHOPEDIC AND SOFT TISSUE**

3 credits.

Examination techniques, diagnostic aids and surgical procedures relevant to the gastrointestinal, integumentary, musculoskeletal, respiratory and genitourinary systems of the equine and food animal species.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 632 – SMALL ANIMAL SURGERY LABORATORY**

2 credits.

Basic skills necessary for participation in the surgical management of small animals in the Veterinary Medical Teaching Hospital.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 634 – SMALL ANIMAL ANESTHESIA LABORATORY**

1 credit.

Apply principles and techniques of veterinary anesthesiology to common companion animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 638 – VETERINARY DIAGNOSTIC IMAGING**

2 credits.

Veterinary radiology principles, physical background and diagnostic techniques will be taught and emphasized in laboratory exercises.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**SURG SCI 642 – LARGE ANIMAL SURGERY: CLINICAL ROTATION**

2 credits.

Learn the admission, examination, preoperative management, surgical procedures and postoperative management of large animals presented to the Veterinary Medical Teaching Hospital. Hands-on experience in the Large Animal Surgery Service.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 644 – CLINICS-SMALL ANIMAL ORTHOPEDIC SURGERY**

2 credits.

Rotation through orthopedic and neurosurgical clinics and surgery.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 645 – SENIOR ROTATION IN SMALL ANIMAL GENERAL SURGERY**

2 credits.

Hands-on diagnosis and treatment of general surgical diseases of small animal species.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 646 – VETERINARY ANESTHESIOLOGY-CLINICAL ROTATION**

2 credits.

Clinical anesthesia and pain management techniques including pre-anesthetic evaluation, induction procedures, intraoperative anesthetic and analgesic care and recovery management of small, large and exotic animal species. Critical patient care, novel anesthetic and analgesic techniques and cardiopulmonary resuscitation.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 647 – RADIOLOGY CLINICS**

2 credits.

Clinical clerkship in the Veterinary Medical Teaching Hospital. Provides exercises in technical and interpretive diagnostic radiology.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 675 – SPECIAL TOPICS**

1-5 credits.

Topics vary.

**Requisites:** Declared in Doctor of Veterinary Medicine

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 676 – SPECIAL SPECIES HEALTH**

2 credits.

Basic principles of the clinical management of exotic pet species, with an emphasis on small mammals (rabbits, rodents, etc), birds and reptiles commonly kept as companion animals.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 677 – VETERINARY DENTISTRY ELECTIVE**

1 credit.

Introduction to veterinary dentistry principles and practice.

**Requisites:** Declared in Doctor of Veterinary Medicine with third year standing

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 699 – DIRECTED STUDY**

1-5 credits.

Projects in the laboratory and/or through library work in specific subject area under the direct guidance of a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 710 – SPECIAL SPECIES CLINICAL ROTATION**

2 credits.

Develop clinical proficiency in the basic veterinary care of common exotic pet species routinely seen in general veterinary practice. Learn how to obtain comprehensive medical histories, how to safely restrain, obtain samples and administer drugs in a variety of common exotic pet species. Develop a solid understanding on how to manage common disorders seen in small exotic mammals, pet birds and pet reptiles.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

**SURG SCI 711 – WILDLIFE REHABILITATION MEDICINE ROTATION**

2 credits.

Rotation is a partnership between the UW Vet School, Dane County Humane Society's Wildlife Center and the Wisconsin Humane Societies' (WHS) Wildlife Center in Milwaukee. Develop clinical proficiency in wildlife rehabilitation. Work closely with licensed wildlife rehabilitators at wildlife centers to learn more about native wildlife in rehabilitation settings. Participate in veterinary patient rounds, which are led by UW veterinarians at wildlife centers. Cadaver laboratories, topic presentations and radiograph and blood smear reviews will complement the patient-based learning.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

**SURG SCI 712 – ZOOLOGICAL MEDICINE CLINICAL ROTATION**

2 credits.

Practice medical management of zoological species kept in small- to medium-sized zoological facilities and wildlife rehabilitation cases, in collaboration with local facilities, such as Henry Vilas Zoo, Ochsner Park Zoo, and the Dane County Humane Society's Wildlife Center. Prepare for clinical cases, provide on-site medical evaluations, and complete medical records.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 2 number of completions

**Last Taught:** Spring 2023

**SURG SCI 714 – SMALL ANIMAL RADIATION ONCOLOGY ROTATION**

1-2 credits.

Apply clinical veterinary medicine in a small animal oncology setting that focuses on radiotherapy. Work alongside veterinarians and veterinary technicians with expertise in veterinary oncology. Participate in case management and client communication. Expand general knowledge about cancer in dogs and cats, including diagnosis and treatment. Learn about the role of radiotherapy in the treatment of cancer. Understand the patient experience during cancer treatment, specifically related to radiation. Learn about alternative treatment options when radiotherapy is not feasible. Practice clinical skills including physical examination, venipuncture, fine needle aspiration, tissue biopsy, image interpretation, and record keeping.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, for 1 number of completions

**Last Taught:** Spring 2023

**SURG SCI 741 – CLINICAL OPHTHALMOLOGY ROTATION**

2 credits.

Provides experience in ocular examination, problem solving skills, and formulation of diagnostic and therapeutic plans for animals presenting with eye disease. Ocular examination as part of the complete physical examination and ocular manifestations of systemic diseases are emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 743 – ADVANCED ANESTHESIOLOGY/CRITICAL CARE MEDICINE**

2 credits.

Provides advanced, in-depth training in the areas of small, large and exotic animal anesthesia and pain management.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 744 – RESTRAINT AND ANESTHESIA OF EXOTIC ANIMALS**

2 credits.

Provides advanced, directed anesthetic and restraint techniques for multiple exotic animal species such as rodents, rabbits, amphibians, reptiles, primates, fish and birds. The unique pharmacology and physiology of each species will be emphasized.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**SURG SCI 746 – FOOD ANIMAL SURGERY**

2 credits.

Provides didactic and surgical experience in the major, common surgical diseases of cattle and pigs.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**SURG SCI 748 – DENTISTRY AND ORAL SURGERY ROTATION**

1-3 credits.

Dentistry, oral medicine and surgery as well as comprehensive patient care through the use of progressive methods, hospital resources and interdisciplinary specialists.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 750 – SMALL ANIMAL ULTRASOUND ELECTIVE**

1 credit.

Introduction to hands-on ultrasound imaging and expand on selected portions of ultrasound physics, literature and problem-based case studies.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 775 – EXTERNSHIP**

1-24 credits.

Offers opportunities for faculty coordinated experience in the veterinary medical profession outside School of Veterinary Medicine.

**Requisites:** Declared in Doctor of Veterinary Medicine with fourth year standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**SURG SCI 812 – RESEARCH ETHICS AND CAREER DEVELOPMENT**

2 credits.

Provides instruction in principles and concepts of research ethics through presentations and discussion of case studies. Topics pertinent to development of a successful career in research are also included.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

## THEATRE AND DRAMA (THEATRE)

**THEATRE 100 – EXPERIENCING THEATRE**

2-3 credits.

By attending live theatre performances, watching films of theatrical productions and participating in colloquiums with theatre professionals, explore how theatre is made through the lens of various theatre artists. Through this exploration, develop an understanding and a deeper appreciation of performative events as well as critically think about those experiences. Explores performance and the human condition, using acquired knowledge to build empathy and appreciation for the complexities of one's own and other people's perspectives.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE/ENGL 120 – INTRODUCTION TO THEATRE AND DRAMATIC LITERATURE**

3-4 credits.

Reading important plays, attending stage productions, writing and thinking critically about theatre and drama. Emphasis on developing analytic skills in dramatic literature and theatre production.

**Requisites:** None

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE 130 – FUNDAMENTALS OF THEATRICAL DESIGN**

3 credits.

Foundational elements of theatrical design and developing the skills to translate text into visual and/or aural content. Involves an introduction to script analysis; visual, aural, and dramaturgical research; problem solving skills; creative exploration and visual communication. Relevant to designers, directors, actors, stage managers, technicians, and informed audience members.

**Requisites:** None

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE 140 – VOICE 1: EFFECTIVE COMMUNICATION**

3 credits.

Introduces and explores the fundamentals and discipline of voice and speech. Provides a foundation from which the student will begin to access and engage healthful, practical, and creative vocal and speech function. Introduction to methods of expression for acting and public speaking.

**Requisites:** None

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE 150 – ACTING I: INTRODUCTION TO ACTING**

3 credits.

Provides a basic introduction to the craft of acting. Develops disciplines and tools of the actor as they relate to voice, movement, language skills, and engaging communication. Explores how actor training skills can be a benefit in a wide context of professional and personal endeavors.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 160 – TECHNICAL THEATRE FUNDAMENTALS**

3 credits.

Learn how to mount a theatrical production. Through scenery, costumes, lighting, sound, and stage management explore the relationship between the technical components of the production process. Includes lectures as well as practical experience in University Theatre productions.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 161 – BACKSTAGE LABORATORY I**

2 credits.

Learn through practical participation in University Theatre productions; lab choices include scenery and costume construction, lighting, and sound.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Summer 2019**THEATRE 162 – BACKSTAGE EXPERIENCE**

1 credit.

Participation in University Theatre performance in various capacities including light or sound console operator, wardrobe, properties, carpentry, or other areas. Mandatory participation in all evening and weekend technical rehearsal and performance activities.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**THEATRE 199 – DIRECTED STUDY**

1-3 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2008**THEATRE 200 – ACTING SKILLS FOR LIFE**

2 credits.

Skills learned by actors in the theatre world can be applied to presentations and interactions in business, education, and beyond. Utilizing acting techniques traditionally used in theatre to enhance confidence and communication in interviews, presentations, elevator pitches, authentically connecting on a personal level with others, and how to avoid or better deal with stage fright.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 213 – DIGITAL DESIGN VISUALIZATION FOR ENTERTAINMENT**

3 credits.

Offers the fundamental principles and the practical knowledge of design visualization for theatrical productions and entertainment events. Focuses on building students' capability of producing clear and effective visual presentations of their creative design concepts by using the most cutting edge 2D and 3D digital applications.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**THEATRE/DANCE 218 – AFRICAN DANCE PERFORMANCE**

2 credits.

Technique, practice and performance of complex African and African-based dances in relation to polyrhythmic musical and percussive accompaniment. Study of historical and cultural contexts of these forms. Development of improvisational skills in dialogue with musicians.

**Requisites:** DANCE 118**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2017**THEATRE 219 – UNDERGRADUATE TOPICS IN THEATRE AND DRAMA**

1-3 credits.

Undergraduate study in subjects of current interest in design, performance, technology, history, dramatic theory, literature criticism, or theatre/drama education.

**Requisites:** None**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**THEATRE 220 – SCENIC STUDIO PRACTICUM**

1 credit.

Hone skills learned in Technical Theater Fundamentals while working side-by-side with designers and technicians building University Theatre productions.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 221 – COSTUME STUDIO PRACTICUM**

1 credit.

Hone skills learned in Technical Theater Fundamentals while working side-by-side with designers and technicians building University Theatre productions.

**Requisites:** THEATRE 160**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 222 – LIGHTING & SOUND STUDIO PRACTICUM**

1 credit.

Students hone skills learned in Technical Theater Fundamentals while working side-by-side with designers and technicians building University Theatre productions.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 224 – HISTORY OF THEATRICAL PRODUCTION**

3 credits.

Examines key periods in theatre history from ancient to modern. Emphasis on staging practices and theatre as a cultural institution.

**Requisites:** ENGL/THEATRE/ENGL 120**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2014**THEATRE 230 – ENVIRONMENT DESIGN FOR GAMES AND OTHER VIRTUAL STORYTELLING SPACES**

3 credits.

Video game environments by their nature are designed to support storytelling. Develop the skills needed to create rich virtual worlds using theatrical storytelling techniques and three-dimensional modeling.

**Requisites:** THEATRE 130**Repeatable for Credit:** No**Last Taught:** Spring 2022**THEATRE 234 – COLLABORATIVE PROBLEM SOLVING**

3 credits.

Theatre is the manifestation of collaborative problem solving. Collaboration is a process involving two or more individuals working toward a common goal, through interdependent behavior with individual accountability. Builds collaborative and creative problem solving skills to generate innovative solutions to complex problems and practices.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 240 – INTERMEDIATE VOICE TRAINING**

3 credits.

Techniques and practice for increasing vocal strength, range, flexibility and the study of diction. Attention to individual problems in tone production, resonance, and articulation.

**Requisites:** Consent of instructor**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 250 – FUNDAMENTALS OF ACTING**

3 credits.

Focuses on developing fundamental acting techniques (voice, characterization, physicality) and learn to apply skills in individual performance and scene study of contemporary dramatic texts.

**Requisites:** THEATRE 150**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE/DANCE 259 – COLLABORATIVE ARTS PERFORMANCE LAB: DEVISING COLLABORATIVE PERFORMANCE THROUGH HIP HOP ARTS**

1-2 credits.

Work together to create a repertory company which produces performances of short hip hop theater and other collaborative performance art works for public viewing. Experimental works are researched and developed. Involves the development of collaborative and small group pieces as well as artistic training with a focus on individual and multi-voice work, theater improvisation, dance/movement.

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**THEATRE 260 – PRODUCING THEATRE**

3 credits.

Focuses on the fundamental principles and practical operational knowledge of different theatrical business models. Topics include: planning, scheduling, marketing, fundraising, budgeting, hiring, commercial vs. not-for-profit, legal concerns, and public relations.

**Requisites:** None**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 266 – FUNDAMENTALS OF STAGE LIGHTING TECHNOLOGY**

3 credits.

Theories and techniques for the use of stage lighting equipment, special effects, and other stage electrics devices.

**Requisites:** THEATRE 160**Course Designation:** Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2022



**THEATRE 270 – FUNDAMENTALS OF STAGECRAFT**

3-4 credits.

Theory and techniques of stagecraft for theatrical production. When taken for 4 credits, a lab component required.

**Requisites:** THEATRE 160

**Course Designation:** Level - Elementary

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE 298 – DIRECTED STUDY**

1-3 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2004

**THEATRE 299 – DIRECTED STUDY**

1-3 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**THEATRE/DANCE/FOLKLORE 321 – JAVANESE PERFORMANCE**

2 credits.

Technique and practice of classical Javanese dance in its musical, historical and cultural contexts.

**Requisites:** Junior standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**THEATRE 324 – TRADITIONS IN DRAMATIC LITERATURE**

3 credits.

Multiple approaches to reading plays from a variety of important periods in dramatic literature with an emphasis on the life of older plays in the contemporary repertory. When possible, some course materials are linked to University Theatre production.

**Requisites:** ENGL/THEATRE/ENGL 120

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**THEATRE 327 – HISTORY OF COSTUME FOR THE STAGE**

3 credits.

Examines dress in Western civilization through the cultural context of history, art and fashion and related to theatrical costume design through a comparison of theatre designs to their primary visual sources.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**THEATRE 329 – INTRODUCTION TO AFRICAN-AMERICAN PERFORMANCE**

3-4 credits.

Introduction to historical, social and political contexts of African-American artistic expression in theatre and performance. Offers critical analyses of theatre, films, and/or dance forms that reflect cultural values, ideologies and performance aesthetics rooted in African-American and West African traditions.

**Requisites:** Junior standing

**Course Designation:** Ethnic St - Counts toward Ethnic Studies requirement

Breadth - Humanities

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**THEATRE/LITTRANS 335 – IN TRANSLATION: THE DRAMA OF HENRIK IBSEN**

3-4 credits.

Often considered "the father of modern drama," the Norwegian playwright Henrik Ibsen (1828-1906) is a major figure of world literature whose dramatic works remain fascinating and globally influential, both as texts and through performance and adaptation. Read and discuss Ibsen in English translation, with a focus on Ibsen's historical contexts, dramatic techniques, social and political thought, and the reception and adaptation of his work in modern culture.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022



**THEATRE/LITTRANS 336 – IN TRANSLATION: THE DRAMA OF AUGUST STRINDBERG**

3-4 credits.

Provides in-depth knowledge of the artistic career of the influential Swedish playwright, August Strindberg (1849-1912), and a general knowledge of the literary, artistic, and intellectual history that shaped his artistic production.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2018**THEATRE 342 – FUNDAMENTALS OF MOVEMENT FOR THE STAGE**

1-3 credits.

Development of the actor's awareness of habitual patterns of tension. Elements of movement including space, time, energy. Introduction to improvisation skills.

**Requisites:** Sophomore standing**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**THEATRE 350 – ACTING REALISM**

3 credits.

Intensive scene study from the major works of selected modern playwrights, concentrating on realism.

**Requisites:** Consent of instructor**Course Designation:** Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022**THEATRE 351 – FUNDAMENTALS OF ASIAN STAGE DISCIPLINE**

3 credits.

Intensive movement discipline using Asian martial art techniques and mask work as a preparation for performance.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020**THEATRE 352 – AUDITIONING FOR STAGE AND SCREEN**

3 credits.

Student actors develop career-focused skills and confidence in auditioning for theatre and on-camera projects. Includes exercises in handling "cold" readings, prepared monologues, interviews, and improvisational auditioning. Student will also learn to look at auditions from the casting director's point of view.

**Requisites:** THEATRE 150 and 250**Repeatable for Credit:** No**Last Taught:** Fall 2021**THEATRE 357 – INTRODUCTION TO THEATRE FOR CULTURAL AND SOCIAL AWARENESS**

3 credits.

Analysis of sensitive subject matter in U.S. workplace and school/community settings through theatre and drama. Examines race relations, cultural diversity, gender, sexual orientation and other topics in plays, films, and current events. Develops theatrical models to encourage healthy dialogue.

**Requisites:** Consent of instructor**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 360 – PERFORMANCE IN PRACTICE**

1-3 credits.

Students gain practical theatrical experience, skills, and knowledge by working on a University Theatre production. The assignments will involve responsibilities as Actor, Director, Assistant Director, Stage Manager, Assistant Stage Manager, or other approved performance related positions on a University Theatre production.

**Requisites:** Consent of instructor**Course Designation:** Workplace – Workplace Experience Course**Repeatable for Credit:** Yes, for 5 number of completions**Last Taught:** Spring 2023**THEATRE 361 – BACKSTAGE LABORATORY II**

1-2 credits.

Emphasis on student's involvement with a specific responsibility within theatrical production.

**Requisites:** Consent of instructor**Course Designation:** Breadth – Humanities

Level – Intermediate

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**THEATRE/CURRIC/SLAVIC 362 – DRAMA FOR TEACHING AND LEARNING**

3 credits.

Methods for all involved in teaching and learning, including foreign languages. Introduction to philosophy, methodology, and practice of the use of drama and performance techniques in any educational or recreational settings. Focus on creativity and embodied and contextual learning, based on current neurological, psychological, and sociological research. A practical class which includes demonstration and practice with children.

**Requisites:** None**Course Designation:** Breadth - Humanities

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2022**THEATRE 363 – PRINCIPLES AND PRACTICE OF STAGE COSTUME DESIGN**

3-4 credits.

A survey of stage costume. Fundamentals inherent in costume design process; introduction to procedures and skills needed for executing costumes. When taken for 4 credits, a lab component required.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 364 – MAKEUP FOR THE THEATRE**

3 credits.

An introduction to makeup design for the theater. Learn the aesthetics of makeup, color theory, and the technical aspects of applying makeup. Topics include the importance of developing a character through makeup, techniques of physically applying makeup to the actor and special effects makeup such as old age and prosthetic makeup appliances.

**Requisites:** Sophomore standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Fall 2022**THEATRE 365 – SEWING FOR THE THEATRE**

3 credits.

Intermediate sewing techniques used to create theatrical garments.

**Requisites:** THEATRE 263**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2021**THEATRE/ART 366 – STAGE LIGHTING I**

3-4 credits.

Application of lighting design to the stage and natural environment. Color principles, lighting instruments, and control equipment. Production participation and labs.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**THEATRE 367 – SCRIPT ANALYSIS**

3 credits.

A study of dramatic structure and examination of the basic elements of theatrical text. Introduction to applied methods of script analysis as an approach to researching, writing, directing, designing, performing and critiquing plays and screenplays.

**Requisites:** None**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 368 – FUNDAMENTALS OF DIRECTING**

3 credits.

Principles and practice of play direction; motivational analysis, composition, movement, stage business and rehearsal techniques. Student directs a final project.

**Requisites:** THEATRE 367**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE 370 – DRAFTING FOR THE THEATRE**

3-4 credits.

Methods and development of techniques used in theatrical drafting.

**Requisites:** THEATRE 160 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2019**THEATRE 371 – SOUND FOR THEATRE**

3-4 credits.

Audio equipment and its use in the theatre; the integration of sound as a design element of live theatrical performance.

**Requisites:** Sophomore standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2017

**THEATRE/ART 372 – SET DESIGN I**

3 credits.

Principles of composition, scale, perspective, and color applied to the stage; production of ground plans, elevations, sketches, and models.

**Requisites:** None**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**THEATRE 379 – INTRODUCTION TO STAGE MANAGEMENT**

3 credits.

Principles of stage management from auditions through closing night. Class work and supplementary production experience.

**Requisites:** THEATRE 160 or graduate/professional standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE/GEN&WS 415 – INTRODUCTION TO CONTEMPORARY FEMINIST THEATRE AND CRITICISM**

3 credits.

Introduction to the history, literature and theory of feminist theatre and of feminist criticism of mainstream theatre in the United States from 1960 to the present.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**THEATRE/DANCE/FOLKLORE 421 – JAVANESE PERFORMANCE REPERTORY**

2 credits.

Introduction to Javanese theatre performance in a Javanese epic tradition. Includes use of Javanese gamelan music as accompaniment for dance drama.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2015**THEATRE/LITTRANS 423 – IN TRANSLATION: SLAVIC DRAMA IN CONTEXT**

3 credits.

Slavic playwrights and the European tradition of theatre and drama.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2020**THEATRE 424 – CONTEMPORARY WORLD THEATRE AND DRAMATIC LITERATURE**

3 credits.

Considers important current trends in performance and dramatic literature worldwide. Writing component includes both literary and performance criticism. When possible, some course materials are linked to University Theatre productions.

**Requisites:** Junior standing**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2015**THEATRE/CURRIC 426 – HISTORY, THEORY, AND DRAMATIC CRITICISM IN THEATRE FOR YOUNG AUDIENCES**

3-4 credits.

Historiographical perspectives in theatre for young audiences; analysis of plays for young people, theoretical implications, assumptions, current developments.

**Requisites:** THEATRE 160, 200, CURRIC/SLAVIC/THEATRE/CURRIC/SLAVIC 362, or graduate/professional standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2016**THEATRE 431 – HISTORY OF THEATRES AND STAGING**

3 credits.

Theatre architecture, scenery, costume, acting, directing, and modes of staging in Europe from 500 B.C.

**Requisites:** Sophomore standing**Course Designation:** Breadth - Humanities

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023

**THEATRE 440 – MUSICAL PERFORMANCE FOR THE ACTOR**

3 credits.

Styles and genres of the modern American and British musical theatre for performers. Their application to audition techniques and scene/song presentations.

**Requisites:** THEATRE 140 and 150 or graduate/professional standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**THEATRE 450 – ACTING STYLES**

1-3 credits.

Study and demonstration of the various acting styles from the Greek to the modern. Concentration on two specific styles in a semester.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**THEATRE 451 – ACTING FOR THE CAMERA**

4 credits.

Focuses on the principles of acting for the camera including industry terms, auditioning techniques, and acting techniques for film/television, industrials, and commercials. Learn tools for script analysis, character development, and on-camera performance which will be recorded and critiqued in class.

**Requisites:** THEATRE 250

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**THEATRE/CURRIC 462 – THEATRE FOR YOUNG AUDIENCES: PRODUCTION**

3-6 credits.

A practical class: preparation and performance of a production for young audiences, with development and implementation of accompanying educational material.

**Requisites:** Sophomore standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**THEATRE 464 – COSTUME TECHNOLOGY TOPICS**

3-4 credits.

Examines techniques used to create costumes. Rotating topics including draping, period patternmaking, tailoring, crafts, and painting. When taken for 4 credits, a lab component required.

**Requisites:** Consent of instructor

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**THEATRE 466 – STAGE LIGHTING DESIGN II**

3-4 credits.

Detailed study of lighting design techniques and professional practices for commercial and resident theatres.

**Requisites:** ART/THEATRE/ART 366 and THEATRE 370

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**THEATRE 469 – INTERDISCIPLINARY STUDIES IN THE ARTS**

1-4 credits.

Guest artists offer interdisciplinary courses on topics appropriate to their specializations.

**Requisites:** None

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**THEATRE 472 – SCENIC PAINTING**

3 credits.

Painting scenery for the stage. Techniques for painting drops, flats, and props in a range of illusion effects.

**Requisites:** Sophomore standing

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**THEATRE/ENGL 477 – DIASPORA AND THEATRE**

3 credits.

Study of the drama and theatre of a variety of immigrant communities in three Western locations: Britain, the United States, and Canada. Focuses on current theories of diaspora and transnationalism, the place of theatre in diasporic writing, and the literary, performative, and material dimensions of the genre.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2018**THEATRE 500 – THE BUSINESS OF THE BUSINESS**

3 credits.

Explores the real-world practicalities of the business side of show business, and gives students the business tools and resources necessary to be successful as directors, designers, stage managers, and technicians. Addresses the unique business demands of working artists.

**Requisites:** None**Course Designation:** Grad 50% – Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2021**THEATRE 501 – THE BUSINESS OF ACTING**

3 credits.

Teaches actors the vital, non-performance skills and knowledge needed to launch professional acting careers. Knowledge of self-promoting, marketing, unions, networking, headshot/resumes, agents, casting directors, trade publications, and more will empower the actor and ease their transition into the professional world.

**Requisites:** Junior standing**Repeatable for Credit:** No**Last Taught:** Fall 2022**THEATRE 522 – EXPERIMENTAL DRAMA: THE THEATRE OF EUROPE 1850-THE PRESENT**

3 credits.

The development of realistic and postrealistic forms in modern and postmodern drama, from Zola, Ibsen, Strindberg, and Chekhov through futurism, expressionism, Dada, and surrealism, Brecht, the Theatre of the Absurd, and contemporary European theatre.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**THEATRE/CURRIC 525 – THEATRE IN EDUCATION**

3-4 credits.

Theory and practice of theatre in elementary and secondary educational settings. Devise, script, and present programs as actor-teachers and interact with audiences.

**Requisites:** Sophomore standing**Course Designation:** Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2017**THEATRE 526 – THE THEATRES OF CHINA AND JAPAN**

3 credits.

An advanced study of the theatres of China and Japan in relation to aesthetics and form.

**Requisites:** Sophomore standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2021**THEATRE/SLAVIC 532 – HISTORY OF RUSSIAN THEATRE**

3 credits.

The history of Russian theatre and related arts (including opera and ballet) with emphasis on performance history.

**Requisites:** Junior standing**Course Designation:** Breadth – Literature. Counts toward the Humanities req

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2014**THEATRE 541 – ACTING SHAKESPEARE**

1-3 credits.

Studio presentation of Shakespearean drama with emphasis on language and verse structure; techniques for enhancing performances skills.

**Requisites:** THEATRE 240 and 350 or graduate/professional standing**Course Designation:** Breadth – Humanities

Level – Advanced

L&amp;S Credit – Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2022

**THEATRE 550 – ADVANCED SCENE STUDY**

1-3 credits.

Intensive scene study from the major works of selected modern playwrights.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2022

**THEATRE 561 – BACKSTAGE LABORATORY III**

1-2 credits.

Emphasis on fulfilling one major assignment in theatre performance or production situation such as actor, stage manager, master carpenter, wardrobe master, properties master.

**Requisites:** Consent of instructor

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**THEATRE/CURRIC 562 – DRAMA IN EDUCATION: ADVANCED STUDIES**

3-4 credits.

Advanced studies in theories and practices of drama in education.

**Requisites:** CURRIC/SLAVIC/THEATRE/CURRIC/SLAVIC 362

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**THEATRE 563 – COSTUME DESIGN II**

3 credits.

Problems in use of line, form, color, texture, and movement in the design of costumes for the stage. Class projects include investigation into classical and contemporary drama.

**Requisites:** THEATRE 363

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**THEATRE 570 – ADVANCED STAGECRAFT**

3 credits.

An intensive study of stage rigging, scenic locomotion, set construction and structural analysis techniques.

**Requisites:** THEATRE 270 and THEATRE 370 (or concurrent enrollment in THEATRE 370) or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**THEATRE/ART 572 – SET DESIGN II**

3 credits.

Historical survey of visual theatre, painting, and architectural styles adapted to various dramatic forms. Application of design elements and styles to contemporary theatre productions.

**Requisites:** ART/THEATRE/ART 372

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**THEATRE/ENGL 575 – BRITISH DRAMA, 1914 TO PRESENT**

3 credits.

Plays and playwrights from the first World War to the present, including movements leading to the "revolt" of 1956 and subsequent proletarian and absurdist drama. Plays by Shaw, O'Casey, Maugham, Coward, Eliot, Osborne, Beckett, Pinter, Stoppard, Arden, Wesker, Bond, Churchill and others.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**THEATRE/ENGL 576 – SURVEY: THEORIES OF DRAMA**

3 credits.

Selected major critical and theoretical sources, from Aristotle to the present day; the influences of theories upon playwriting and modes of theatrical production.

**Requisites:** Junior standing

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019



### **THEATRE/ENGL 577 – POSTCOLONIAL THEATRE: DRAMA, THEORY AND PERFORMANCE IN THE GLOBAL SOUTH**

3 credits.

Study of drama, dramatic theory and theatrical practices in postcolonial cultures, primarily in Asia, Africa and the Caribbean. Considers status of drama/theatre in postcolonial studies and focuses on issues of form, language, intertextuality, trans-culturation, material organization and reception.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

### **THEATRE/ENGL 578 – MODERN AMERICAN DRAMA AND THEATRE**

3 credits.

Representative twentieth-century plays from Glaspell and O'Neill to the present considered within contemporary cultural, theatrical and academic context.

**Requisites:** Junior standing

**Course Designation:** Breadth - Literature. Counts toward the Humanities req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

### **THEATRE 579 – ADVANCED CONCEPTS IN STAGE MANAGEMENT**

2 credits.

Advanced study of organizational behaviors, theatre infrastructures, styles communication techniques in relation to Stage Management.

**Requisites:** THEATRE 379

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **THEATRE 595 – TOPICS IN THEATRE AND DRAMA: STUDY ABROAD**

1-6 credits.

A course carried with a UW-Madison study abroad program which has no equivalent on this campus.

**Requisites:** None

**Course Designation:** Breadth - Humanities

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2002

### **THEATRE 597 – INTERNSHIP IN THEATRE**

1-6 credits.

Enables theatre majors with a supervised internship to earn academic credit while engaged in a professional setting outside of the University and directly related to their field of study.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

### **THEATRE 619 – SPECIAL TOPICS IN THEATRE AND DRAMA**

1-3 credits.

Specialized subjects of current interest in design, performance, technology, history, dramatic theory, literature criticism, and theatre/drama education.

**Requisites:** Sophomore standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

### **THEATRE 631 – THEORIES OF ACTING**

3 credits.

Interdisciplinary and cross-cultural seminar on the historical, cultural, performative, aesthetic, and ideological construction of acting on stage.

**Requisites:** ENGL/THEATRE/ENGL 120 or Graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### **THEATRE 661 – ADVANCED PRODUCTION PRACTICUM**

1-3 credits.

Provides students the opportunity to apply their knowledge in a production setting. Enrollment is limited to designated Dramaturg, Lighting Designer, Costume Designer, Set Designer, Technical Director, Assistant Dramaturg, Assistant Designers, or Assistant Technical Director on a season production for the University Theatre.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**THEATRE 681 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study for students completing honor theses. For further information, consult the department's Undergraduate Advisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**THEATRE 682 – SENIOR HONORS THESIS**

3 credits.

Mentored individual study for students completing honor theses. For further information, consult the department's Undergraduate Advisor.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**THEATRE 691 – SENIOR THESIS**

2-3 credits.

Mentored individual study for students completing theses.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**THEATRE 692 – SENIOR THESIS**

2-3 credits.

Mentored individual study for students completing theses.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**THEATRE 698 – DIRECTED STUDY**

1-6 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2015

**THEATRE 699 – DIRECTED STUDY**

1-6 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**THEATRE 713 – ADVANCED DIGITAL DESIGN VISUALIZATION FOR ENTERTAINMENT**

3 credits.

Offers advanced knowledge of design visualization for theatrical productions and entertainment events. Focuses on producing clear and effective visual presentations of creative design concepts by using the most cutting edge digital applications that include 3D contents modeling, texturing, still and animated rendering, VR and interactive output packaging.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**THEATRE/ENGL 731 – ADVANCED THEATRE HISTORY 500 BC TO 1700**

3 credits.

Problems of scholarship in the dramatic, performance and staging practices of major traditions of world theatre history between 500 BCE and 1700 including the theatres of ancient Greece and Rome; medieval, Renaissance and early modern Europe; and the Muromachi and Tokugawa eras in Japan.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**THEATRE/ENGL 732 – ADVANCED THEATRE HISTORY 1700 TO PRESENT**

3 credits.

Problems of scholarship in the dramatic, performance and staging practices of major traditions of world theatre history since 1700, including melodrama, naturalism, the avant-garde, and other movements that helped shaped contemporary theatre.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**THEATRE 740 – VOICE TRAINING**

3 credits.

Principles of voice and speech for the actor.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**THEATRE 742 – GRADUATE STAGE MOVEMENT**

3 credits.

Advanced study of processes, styles and techniques of stage movement. Individual and group projects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**THEATRE 750 – GRADUATE ACTING**

1-3 credits.

Advanced study of process and technique in acting. Individual and group projects.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2014

**THEATRE 763 – COSTUME DESIGN III**

3 credits.

Advanced problems in costume design for the stage.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**THEATRE 770 – ADVANCED THEATRE TECHNOLOGY**

3 credits.

Detailed study of research and practice in the physical theatre and its scenic devices.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2016

**THEATRE 799 – INDEPENDENT STUDY**

1-6 credits.

Collaborate with instructor for personalized curriculum.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**THEATRE 911 – SEMINAR-PROBLEMS IN THEATRE AND DRAMA**

2-3 credits.

Topics variable.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2018

**THEATRE 970 – COLLABORATIVE DESIGN & TECHNOLOGY STUDIO**

3 credits.

Graduate seminar focused on providing advanced students in design and technology opportunities to collaborate on projects within the classroom.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**THEATRE 990 – RESEARCH AND THESIS**

1-9 credits.

Independent research and writing under the supervision of a staff member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2021

**THEATRE 999 – INDEPENDENT STUDY**

1-3 credits.

Independent pursuit of a creative project designed by the student and supervised by a staff member.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

# URBAN AND REGIONAL PLANNING (URB R PL)

## URB R PL 215 – WELCOME TO YOUR URBAN FUTURE

3 credits.

For many, our shared future experience will be urban and interconnected. With increasing urbanization, comes ever-changing pressures on rural and suburban places, and building a sustainable and equitable urban future will require a diversity of people from many disciplines, social backgrounds, and ways of thinking. Introduction to those disciplines and perspectives occurs through three major themes: (1) organization of cities (e.g., transportation, architecture/urban design, utilities, nature in the city), (2) services within cities (e.g., economic, governance, ecological), and (3) dynamics of cities (e.g., incremental changes – or transformations – that could shape urban futures around the globe). Each theme will highlight multiple disciplines, their historical and potential future roles in shaping cities, and their interconnections within urban systems.

**Requisites:** None

**Course Designation:** Breadth – Humanities

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## URB R PL/GEOG 305 – INTRODUCTION TO THE CITY

3–4 credits.

Investigates urbanization as a general process, as well as the resulting contemporary physical, social, cultural and political- economic forms of cities. Emphasis will be placed on the history and current forms of spatial and social segregation of cities by race, class, ethnicity, and gender. The myriad ways that cities have addressed the tensions emerging from this history of spatial and social segregation will be highlighted. Further, emphasis will be placed on understanding the experiences of those most-affected by historical and continuing segregation.

**Requisites:** Sophomore standing

**Course Designation:** Ethnic St – Counts toward Ethnic Studies requirement

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## URB R PL/A A E/ECON/REAL EST 306 – THE REAL ESTATE PROCESS

3 credits.

Introductory overview focused on the key aspects of the real estate process: developing real estate, permitting real estate, buying and selling real estate, understanding the economics of real estate, financing real estate, valuing real estate, leasing real estate, and managing real estate.

**Requisites:** (ECON 101, 111, or A A E 215) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## URB R PL/JOURN/POLI SCI 373 – INTRODUCTION TO SURVEY RESEARCH

3 credits.

Theory and practice of survey research; planning, sampling, questionnaire construction, interviewing, content analysis, machine tabulation, analysis of data; two hours lecture; two hours lab or field work. Not open to students with credit for POLI SCI 544 prior to fall 2017

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

## URB R PL 375 – SPECIAL TOPICS

1-3 credits.

Exploration of special issues or problems in urban planning.

**Requisites:** Sophomore standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

## URB R PL 411 – MARKETPLACES AND ENTREPRENEURSHIP

3 credits.

The history, practices, processes, and prospects of marketplaces generally and farmers markets in particular. Includes the history, practices, and processes, of entrepreneurship and the tight fit between markets and entrepreneurship. Explores marketplaces and entrepreneurship in through the lens of economic development, food justice, and political regionalism.

**Requisites:** Sophomore standing

**Course Designation:** Gen Ed – Communication Part B

Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

## URB R PL/ECON/REAL EST 420 – URBAN AND REGIONAL ECONOMICS

3 credits.

Focuses on the study of the allocation of scarce resources across space. Uses economic methods to analyze urban real estate. Topics covered include the determinants of real estate values, the location decisions of households and firms, land use, urban growth and agglomeration, real estate pricing, cycles, development, housing market and policies, and sustainable development.

**Requisites:** (ECON 101 or 111) or declared in undergraduate Business Exchange program

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/ECON/ENVIR ST/POLI SCI 449 – GOVERNMENT AND NATURAL RESOURCES**

3-4 credits.

Problems of public policy and administration for development and use of natural resources.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2019

**URB R PL/LAND ARC 463 – EVOLUTION OF AMERICAN PLANNING**

3 credits.

The nature and cultural significance of contemporary methods for the systematic formulation of public policies for community, metropolitan, and state development through comprehensive planning. Historic roots, recent trends and new directions in American planning concepts, institutions and professional specializations.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/GEOG 503 – RESEARCHING THE CITY: QUALITATIVE STRATEGIES**

3 credits.

Explores, and applies, qualitative methods in the field of urban geography.

An introduction to debates around the analysis and interpretation of qualitative data is provided, grounded in concrete urban research.

Participation in a three-day field course is required.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**URB R PL/GEOG 505 – URBAN SPATIAL PATTERNS AND THEORIES**

3 credits.

Various urban empirical regularities and theories which explain them.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**URB R PL/GEOG 506 – HISTORICAL GEOGRAPHY OF EUROPEAN URBANIZATION**

3 credits.

Historical geography of urban development in Europe from classical times to the post-World War II era, with emphasis on changes in built environment, public space and infrastructure, land use, and urban systems.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2015

**URB R PL 512 – GENTRIFICATION AND URBAN RESTRUCTURING**

3 credits.

An intensive analysis of the process of gentrification through its historical and spatial development within moments of post-fordist urban restructuring in the United States. Highlights urban theory and methodological questions important to the study of gentrification that are relevant to the fields of urban planning, geography and sociology. Case study investigation of particular locations will provide examples to test the applicability of the various analytical frameworks presented in the class.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/A A E/REAL EST 520 – COMMUNITY ECONOMIC ANALYSIS**

3 credits.

Economic theory (location and growth) applicable to community economic development; the role of private and public sector in local economic development, and techniques for economic analysis of community.

**Requisites:** ECON 301 or 311 or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/ENVIR ST/GEOG/LAND ARC 532 – APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS IN PLANNING**

3 credits.

Explores planning-related Geographic Information System (GIS) data, applications, analytical tools, and implementation issues.

**Requisites:** CIV ENGR/ENVIR ST/GEOG/CIV ENGR/ENVIR ST 377 or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL 550 – TRANSPORTATION AND THE BUILT ENVIRONMENT**

3 credits.

Investigation of multi-modal transportation, travel behavior, and urban form. Attention to site, neighborhood, regional, and global scales. Consideration of public health, environmental, economic, and social equity outcomes.

**Requisites:** Senior standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**URB R PL 551 – CLIMATE ACTION PLANNING: SUSTAINABLE TRANSPORTATION**

3 credits.

Learn fundamental concepts of climate action planning and sustainable transportation through hands-on collaborations with the University of Wisconsin-Madison Office of Sustainability, Transportation Services, and other partners. Work with real world data to analyze policies, programs, and plans to reduce greenhouse gas emissions from travel, as well as the potential health and well-being co-benefits of sustainable transportation interventions. Analyze further reduction of the campus and community carbon footprints through practice-oriented green fleet management, behavior-based tools to support participation in active travel, modifications to the built environment, and other interventions.

**Requisites:** Senior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Spring 2023**URB R PL/A A E/CIV ENGR/ENVIR ST 561 – ENERGY MARKETS**

3 credits.

Energy resources are an essential element of the world's business, political, technical and environmental landscape. Analytic tools provided by the discipline of economics expands our understanding of this critical issue. Energy supply markets reviewed include both fossil fuels and renewable resources. Energy demand sectors include residential, commercial, industrial and transportation. Electricity represents an intermediate energy market. The interactions among these markets participants indicate how scarce resources are allocated among competing needs in the world economy.

**Requisites:** A A E 215, ECON 101, 111, or graduate/professional standing**Course Designation:** Breadth - Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2017**URB R PL 590 – CONTEMPORARY TOPICS IN URBAN AND REGIONAL PLANNING**

1-3 credits.

Examination of special issues or problems in urban and regional planning and development, such as mineral development in Wisconsin or fringe development in Madison. Topic and faculty vary.

**Requisites:** Senior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**URB R PL 597 – UNIVERCITY YEAR GUIDED EXPERIENCE**

1 credit.

Orientation to the UniverCity Year program and underlying theory and applied knowledge around community engagement, the function of local governments, and working with local officials and professional staff. Gain core competencies for applied, community-based learning projects and the importance of place-based learning. Includes multidisciplinary approaches to problem-solving, access and use of information resources, reflection and action on ethical and professional issues, consideration of social and systemic roots of issues faced by local municipalities, and preparing written reports.

**Requisites:** Junior standing**Course Designation:** Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Fall 2019**URB R PL 601 – SITE PLANNING**

3 credits.

Survey of site planning theory and methods; standards for municipal review of site plans and related design proposals. Topics include architecture, vehicle circulation and parking, pedestrian circulation, stormwater management, landscaping, outdoor lighting, and signage.

**Requisites:** Senior standing**Course Designation:** Breadth - Either Humanities or Social Science

Level - Advanced

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2022**URB R PL 611 – URBAN DESIGN: THEORY AND PRACTICE**

3 credits.

Focusing on three basic components of the built environment (buildings, transportation systems, and open spaces), addresses the forces that shape land use and transportation patterns, the effects of urban form on public health, safety, and welfare, and ways that communities can make their built environments more livable and environmentally sustainable.

**Requisites:** Senior standing**Course Designation:** Level - Intermediate

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No**Last Taught:** Fall 2020



**URB R PL/C&E SOC/SOC 617 – COMMUNITY DEVELOPMENT**

3 credits.

Social, cultural and personality factors influencing community development, with reference to developing countries as well as contemporary rural communities; consideration of theoretical and operational issues.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**URB R PL/ECON/REAL EST 641 – HOUSING ECONOMICS AND POLICY**

3 credits.

The economic principles underlying the dynamics of the housing market; filtering, neighborhood decline and abandonment gentrification, tenure choice, mortgage choice, prepayment, mobility, mortgage default, submarket identification, racial discrimination and segregation. Examination of governmental programs affecting the housing market and their objectives and impacts; public and subsidized housing, zoning and land use regulation, rent and price controls, property and income tax policy.

**Requisites:** ECON/REAL EST/URB R PL/ECON/REAL EST 420 or concurrent enrollment

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**URB R PL/GEN&WS 644 – INTERNATIONAL DEVELOPMENT AND GENDER**

3 credits.

In addition to reviewing gender-within-development theory and practice, this course examines specific gender issues including social status and roles, productive and reproductive work, access to resources, identity and citizenship, empowerment, and intersection of race, class, and ethnicity with gender.

**Requisites:** None

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2015

**URB R PL/C&E SOC/SOC 645 – MODERN AMERICAN COMMUNITIES**

3 credits.

Relevance of the concept of community to American society. Review of several basic theories of community and analysis of the nature of community in the broader political and economic context.

**Requisites:** CE SOC/SOC/C&E SOC 140, 210, 211, SOC 181, or graduate/professional standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

**URB R PL/ENVIR ST 668 – GREEN POLITICS: GLOBAL EXPERIENCE, AMERICAN PROSPECTS**

3 credits.

An examination of the writings and activities of green parties and movements around the globe in order to assess the potential of an explicit, radical environmental politics for the United States.

**Requisites:** Junior standing

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**URB R PL/A A E/ECON/ENVIR ST 671 – ENERGY ECONOMICS**

3 credits.

The method, application, and limitations of traditional economic approaches to the study of energy problems. Topics include microeconomic foundations of energy demand and supply; optimal pricing and allocation of energy resources; energy market structure, conduct, and performance; macro linkages of energy and the economy; and the economics of regulatory and other public policy approaches to the social control of energy.

**Requisites:** Graduate/professional standing or (senior standing and A A E 215, ECON 101, or 111)

**Course Designation:** Breadth – Social Science

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2020

**URB R PL 699 – DIRECTED STUDY**

1-6 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**URB R PL 711 – PLANNING FOR FOOD SYSTEMS AND MARKETPLACES**

3 credits.

Planning for and improving the quality of US metropolitan markets and food systems. Topics include public markets, community food security, urban agriculture, and the public health impact of food systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/CIV ENGR/ENVIR ST 717 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR I**

1 credit.

The first of two seminars for planning the activities of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/CIV ENGR/ENVIR ST 718 – WATER RESOURCES MANAGEMENT PRACTICUM PLANNING SEMINAR II**

2 credits.

The second of two seminars for planning the field work, analysis, and reporting of the practicum.

**Requisites:** Declared in Water Resources Management MS or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/CIV ENGR/ENVIR ST 719 – WATER RESOURCES MANAGEMENT SUMMER PRACTICUM**

4 credits.

Interdisciplinary team of students and staff working with agency personnel, citizen groups, and/or private sector representatives on the analysis of a contemporary, problem-oriented water resource issue. Physical, biological, economic and social aspects of the issue analyzed. Comprehensive written report results, practicum's findings and management recommendations.

**Requisites:** ENVIR ST/CIV ENGR/URB R PL/CIV ENGR/ENVIR ST 718

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Summer 2022

**URB R PL/REAL EST 720 – URBAN ECONOMICS**

3 credits.

Analysis of spatial relationships in the urban economy, including urban land, labor and housing markets; urban transport; city governance and finance; and regional models. Historical and applied focus. Interdisciplinary approach emphasizing economics, geography, and planning.

**Requisites:** Graduate standing and (ECON 301 or 311)

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/SOC WORK 721 – METHODS OF PLANNING ANALYSIS**

3 credits.

Research methods and statistics used in analyzing planning problems:

conceptualization, design, and implementation of planning research; statistical methods for analyzing data including review of inferential statistics, analysis of variance, correlation, and multiple regression; use of computer; review of sources of planning data.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL 731 – INTRODUCTION TO REGIONAL PLANNING**

3 credits.

Broad coverage of regional planning--basic concepts, history, influences of the political, economic, and social environment, techniques of analysis and substantive tasks and problems in preparing regional plans.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2019

**URB R PL/ECON/PUB AFFR 734 – REGIONAL ECONOMIC PROBLEM ANALYSIS**

3 credits.

Examination of major theories of regional economic development, with special emphasis upon the evolution and amelioration of regional economic problems. Selected techniques of regional analysis, including economic base multipliers, input/output models, and shift-share analysis are used in the context of setting regional development goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**URB R PL 741 – INTRODUCTION TO PLANNING**

3 credits.

Evolution of contemporary urban and regional planning thought. Major conceptual dilemmas in theory and practice. Emerging trends in planning, e.g., forecasting and futurism.

**Requisites:** Declared in Urban and Regional Planning MS or PhD

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**URB R PL 742 – PLANNING ORIENTATION SEMINAR**

1 credit.

Introduction to the field of planning and orientation to graduate study in urban and regional planning at UW-Madison. Explore planning as a tool for problem solving, planning and social change, the multiple roles in which planners find themselves, useful skills and perspectives, and areas of planning practice. Addresses core values, sustainability, equity and social justice, professional skills, and the role of plans in relation to policies and programs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**URB R PL 751 – INTRODUCTION TO FINANCIAL PLANNING**

3 credits.

State and local financial planning with emphasis on the functional importance of expenditure; special problems in financing city and metropolitan governments; intergovernmental fiscal relations and the use of various budgetary techniques as integral parts of the planning process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL 761 – CENTRAL CITY PLANNING: ISSUES AND APPROACHES**

3 credits.

Social, economic, environmental, and fiscal trends affecting larger, older American cities, critical policy issues confronting central city decision-makers, and major programmatic responses to these issues; the role of planning in response to these trends and issues.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2020

**URB R PL 781 – PLANNING THOUGHT AND PRACTICE**

3 credits.

Intensive analysis of selected planning cases highlighting important issues that planners deal with in practice. Examine case studies in the context of broader framework of planning history, decision making process models and planner role models. Explore subnational planning and regional development issues in developing countries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL 791 – VISUAL COMMUNICATION FOR PLANNERS**

3 credits.

Visual communication in planning addresses the communication of plans - specifically in the form of site plans, master plans, comprehensive plans, illustrative design codes, cartography, analyses maps, among other. Provides a planning and design graphics foundation to help realize the procedures in communication and information management within today's interdisciplinary planning process. Develop skills in graphic communication from techniques currently used in the planning, architecture, engineering, landscape architecture and urban design fields and review several digital graphic representation programs as a means of developing a planning graphics toolkit.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/ENVIR ST/PUB AFFR 809 – INTRODUCTION TO ENERGY ANALYSIS AND POLICY**

3 credits.

Strategy and policy problems in energy policy, both national and international.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**URB R PL/ENVIR ST/PUB AFFR 810 – ENERGY ANALYSIS AND POLICY CAPSTONE**

3 credits.

Interdisciplinary application of energy knowledge to an analysis project for a real-world client. Integrate and apply technical, economic, political, and social factors in energy decision-making.

**Requisites:** Declared in Energy Analysis and Policy Graduate/Professional Certificate or Doctoral Minor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL 814 – ENVIRONMENTAL AND ALTERNATIVE DISPUTE RESOLUTION IN PLANNING**

3 credits.

Principles, methods, and techniques of alternative dispute resolution; characteristics and dynamics of environmental and public policy conflicts; environmental and public policy dispute resolution theory; dispute systems design; applications to planning practice.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2017

**URB R PL/ENVIR ST 821 – RESOURCES POLICY ISSUES: REGIONAL AND NATIONAL**

2-3 credits.

Resource policy issues frequently faced by local and state governments and the federal government. Emphasis: (1) techniques for analysis of resource issues; (2) methods of collating knowledge from natural and social science disciplines which can make meaningful contributions to resolution of resource issues; (3) identification and analysis of strategic points of decision making in the legislative and executive branches of government; and (4) the application of planning techniques for accomplishing resource goals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2015

**URB R PL/LAW 830 – LAND USE CONTROLS**

3 credits.

Limitations imposed upon the use of privately owned land by the court-made law of nuisance, by private covenant, and by public action; master plan, official map, subdivision regulation, zoning, and urban redevelopment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL 833 – PLANNING AND THE LEGAL SYSTEM**

3 credits.

An examination of how the legal system influences community planning. Overview of the institutional framework for planning and the legal authority for tools used to create healthy and sustainable communities.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL 841 – URBAN FUNCTIONS, SPATIAL ORGANIZATION AND ENVIRONMENTAL FORM**

2-3 credits.

Influence of social, economic, and political systems, technological innovations, and architectural concepts on the spatial organization and environmental form of cities and urban areas; the adaptability of urban physical structure to developmental change; planned, conceptual organization and form versus unplanned and ecological organization and form.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/ENVIR ST 843 – LAND USE POLICY AND PLANNING**

3 credits.

Critical evaluation and analysis of land use policies and programs in relation to comprehensive planning and growth management issues in the U.S. The role of legislative and judicial processes and emerging public land use social values and philosophies in the development, regulation, and effectuation of innovative land use policies. Alternative land policy and growth guidance systems of select European countries.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**URB R PL 844 – HOUSING AND PUBLIC POLICY**

3 credits.

Issues and methodological problems encountered in the production, financial, and consumption sectors of housing program design; comparisons with European and Third World country housing and public policy programs.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/ECON 845 – ADVANCED TOPICS IN PUBLIC FINANCE**

1-4 credits.

Advanced public finance problems and literature, research; subject changes each semester; may be repeated. Modules.

**Requisites:** ECON 713 and 714

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2020

**URB R PL/ENVIR ST 865 – WATER RESOURCES INSTITUTIONS AND POLICIES**

3 credits.

Governmental processes and policies for water resources management: major substantive problems and issues; political processes of decision making; problems of governmental organization and intergovernmental arrangements.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/POLI SCI/PUB AFFR 874 – POLICY-MAKING PROCESS**

3 credits.

Examines the political, social, and economic contexts that shape and are shaped by policy making processes. Though the focus is on the US, international comparisons will be made, and students are encouraged to think about the American context through comparative and international perspectives. Familiarizes students with dominant theories and models of policymaking process and policy change, starting with the model of the policy cycle. Focuses in on key topics and issues in policy making, specifically, agenda setting, implementation, and the relationships between policymaking and democracy. Reflects on contemporary and emerging issues and dilemmas of the politics of policy making.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/POLI SCI/PUB AFFR 878 – PUBLIC MANAGEMENT**

3 credits.

Role of administration in American government; problems of organization, bureaucracy and control; public policy as the output of the administrative process.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL/POLI SCI/PUB AFFR 890 – FEDERAL BUDGET AND TAX POLICY AND ADMINISTRATION**

3 credits.

Focuses on national budget and tax policy and administration, and the parallel processes at the state and local levels. Included are discussions of: decision-making theories; budget and tax policy; and analysis of normative and empirical criteria and analytical techniques for assessing alternative policy proposals.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2018

**URB R PL 912 – PLANNING WORKSHOP**

3 credits.

Selected problems in planning to emphasize the interdisciplinary character of planning practice and to give opportunity to apply socioeconomic analysis, physical planning, and implementation techniques.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**URB R PL/ENVIR ST 917 – PUBLIC PARTICIPATION FOR PLANNING AND POLICY MAKING**

3 credits.

Examines public participation for planning and policymaking in both urban and natural environments; considers different types of participation from agency consultation to negotiation; designing, conducting, and evaluating citizen participation are major features.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**URB R PL/ENVIR ST 923 – SEMINAR-LAND PROBLEMS: INSTITUTIONAL DEVELOPMENT**

2-3 credits.

Land tenure and utilization research and policy problems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**URB R PL/SOC 924 – SEMINAR-POLITICAL SOCIOLOGY**

3 credits.

Selected topics in political sociology, e.g., social movements, citizenship, civic engagement, weakening of postwar "social democratic consensus" under financialized globalization pressures.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**URB R PL 932 – SEMINAR-RESEARCH REVIEW AND CRITICISM**

1-3 credits.

Group consideration of thesis or equivalent projects during their preparation; individual reports on successive stages of work.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**URB R PL 945 – SEMINAR IN LAND USE AND COMMUNITY DEVELOPMENT ISSUES**

3 credits.

The social, economic, and political setting of urban blight and the current measures, including urban renewal and model cities programs, to cope with the condition. Attention to social change, concept of neighborhood, and cross-cultural perspectives to renewal and community development.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2017**URB R PL/DS/F&W ECOL 955 – PRACTICAL RESEARCH DESIGN AND METHODS OF EMPIRICAL INQUIRY**

3 credits.

Provides a practical introduction to basic concepts of research question formulation, research designs and alternative methods of inquiry, implications for internal validity of the research and generalizability of the findings, operational definitions and measurement validity, reliability, utility and precision.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2022**URB R PL/POLI SCI 969 – SEMINAR-TRENDS AND ISSUES IN PUBLIC PLANNING**

3 credits.

Critical review of recent and current thought on the nature and role of planning in governmental and quasi-governmental agencies with particular attention to the adverse critics of planning and the issues they raise about the policy formulation process in public affairs.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2014**URB R PL/HISTORY/SOC 979 – SEMINAR IN URBAN HISTORY**

3 credits.

Causes and consequences of urbanization, stressing social and economic aspects of major population movements, with particular attention to the United States.

**Requisites:** Graduate/professional standing**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Fall 2015**URB R PL 990 – RESEARCH AND THESIS**

1-5 credits.

Individual mentored research and study for completing theses, as arranged with a faculty member

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** No**Last Taught:** Spring 2023**URB R PL 999 – INDEPENDENT WORK**

1-3 credits.

Independent study as arranged with a faculty member.

**Requisites:** Consent of instructor**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement**Repeatable for Credit:** Yes, unlimited number of completions**Last Taught:** Spring 2023**ZOOLOGY (ZOOLOGY)****ZOOLOGY/BIOLOGY 101 – ANIMAL BIOLOGY**

3 credits.

General biological principles. Topics include: evolution, ecology, animal behavior, cell structure and function, genetics and molecular genetics and the physiology of a variety of organ systems emphasizing function in humans.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151 or 152**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023**ZOOLOGY/BIOLOGY 102 – ANIMAL BIOLOGY LABORATORY**

2 credits.

General concepts of animal biology at an introductory level emphasizing the evolutionary relationships between animals. Learn about general body plans and strategies used to accomplish the basic tasks of staying alive in major animal groups using preserved and live animals. Study the diversity within each group of animals by integrating the body plans with the lifestyle and ecology of animals. Dissections of earthworm, freshwater mussel, squid, sea star, and rat aid the study of these general principles.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/BOTANY/BIOLOGY/ZOOLOGY 151 or 152**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Elementary

L&amp;S Credit - Counts as Liberal Arts and Science credit in L&amp;S

**Repeatable for Credit:** No**Last Taught:** Spring 2023



**ZOOLOGY/BIOLOGY/BOTANY 151 – INTRODUCTORY BIOLOGY**  
5 credits.

Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics and selected topics in Animal Physiology.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/ ZOOLOGY 101, 102 or BOTANY/BIOLOGY/BOTANY 130

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/BIOLOGY/BOTANY 152 – INTRODUCTORY BIOLOGY**  
5 credits.

Topics include: selected topics in plant physiology, a survey of the five major kingdoms of organisms, speciation and evolutionary theory, and ecology at multiple levels of the biological hierarchy.

**Requisites:** BOTANY/BIOLOGY/ZOOLOGY/BIOLOGY/BOTANY 151

**Course Designation:** Gen Ed – Communication Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 153 – INTRODUCTORY BIOLOGY**  
3 credits.

Topics include: cell structure and function, cellular metabolism (enzymes, respiration, photosynthesis), information flow (DNA, RNA, protein), principles of genetics, and selected topics in Animal Physiology. Designed for engineering majors that do not need a lab component.

**Requisites:** Not open to students with credit for ZOOLOGY/BIOLOGY/ ZOOLOGY 101, 102 or BOTANY/BIOLOGY/BOTANY 130

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/PL PATH 154 – TINY EARTH: ANTIBIOTIC DISCOVERY RESEARCH**  
2 credits.

Learn basic methodology in scientific research and discovery, including laboratory techniques, quantitative reasoning, scientific communication, and collaboration. Gain hands-on laboratory experience working with microbes to test original hypotheses concerning the discovery of potential antibiotic compounds while addressing the world's antibiotic resistance crisis by contributing data to the global "Tiny Earth" network of researchers to advance potential drug development. Tiny Earth seeks to encourage students to pursue careers in science through real-world, applied research experiences and aims to address a worldwide health threat of the diminishing supply of effective antibiotics by "student-sourcing antibiotic discovery." Concurrent enrollment in BIOLOGY/ BOTANY/ZOOLOGY 152 is required for permission to enroll.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 199 – DIRECTED STUDY**  
1-3 credits.

Directed study/independent research. Experience hypothesis development, research through faculty mentorship.

**Requisites:** Consent of instructor

**Course Designation:** Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ZOOLOGY/BOTANY/ENVIR ST 260 – INTRODUCTORY ECOLOGY**  
3 credits.

The relationships of organisms and the environment. Population dynamics and community organization, human-environment relationships, action programs.

**Requisites:** None

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Elementary

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 299 – DIRECTED STUDIES IN ZOOLOGY**  
1-3 credits.

Directed study/independent research. Experience hypothesis development, research through faculty mentorship.

**Requisites:** Consent of instructor

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 300 – INVERTEBRATE BIOLOGY AND EVOLUTION**

3 credits.

Introduction to invertebrate diversity and biology, with emphasis on anatomy, development, and systematic relationships of the main animal phyla. Phyla are discussed in the context of major themes in animal evolution, such as the origin of tissue layers, the diversity of feeding mechanisms, the evolution of terrestrialization, patterns of diversification through time, and the conservation of transcriptional circuitry. Focus on animal diversity from a phylogenetic and developmental perspective.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151 and 152) or BIOCORE 381

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 301 – INVERTEBRATE BIOLOGY AND EVOLUTION LAB**

2 credits.

Introduction to invertebrate diversity and biology, with emphasis on anatomy, development, and systematic relationships of the main animal phyla. Phyla are discussed in the context of major themes in animal evolution, such as the origin of tissue layers, the diversity of feeding mechanisms, the evolution of terrestrialization, patterns of diversification through time, and the conservation of transcriptional circuitry. Focus on animal diversity from a phylogenetic and developmental perspective.

**Requisites:** Concurrent enrollment in ZOOLOGY 300

**Course Designation:** Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/ENTOM 302 – INTRODUCTION TO ENTOMOLOGY**

4 credits.

Principles including morphology and classification.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, ZOOLOGY 153, or BIOCORE 381

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 303 – AQUATIC INVERTEBRATE BIOLOGY**

3 credits.

The form, function, development, basic physiology and ecology of the freshwater and marine invertebrates in the context of their environment. Study live invertebrate specimens, their habitat selection, adaptation and diversity.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2016

**ZOOLOGY 304 – MARINE BIOLOGY**

2 credits.

Explore the biological and ecological systems of the oceans and marginal seas. Focus on understanding how marine organisms interact with their physical environment and how the biological components of the oceans are interconnected through trophic interactions and habitat selection.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ZOOLOGY/ENVIR ST 315 – LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES**

2 credits.

General limnology. Physical, chemical and biological characteristics and processes of lakes. Environmental problems and rehabilitation of lakes.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY 316 – LABORATORY FOR LIMNOLOGY-CONSERVATION OF AQUATIC RESOURCES**

2-3 credits.

Biological, physical, and chemical characteristics and their interrelationships in Wisconsin lakes and streams.

**Requisites:** ENVIR ST/ZOOLOGY/ENVIR ST 315 or concurrent enrollment

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY 320 – FIELD MARINE BIOLOGY**

3 credits.

Provides a hands-on, research-driven experience within a marine environment, centering on exposure to 1) the diverse organisms and ecological interactions of coastal marine habitats 2) conservation issues relevant in these habitats 3) the research process from formulating interesting biological questions to conducting scientific research. Features immersion in a variety of marine habitats along with presentations by experts on marine conservation issues.

**Requisites:** (BIOCORE 381 and 382), (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**ZOOLOGY/F&W ECOL 335 – HUMAN/ANIMAL RELATIONSHIPS: BIOLOGICAL AND PHILOSOPHICAL ISSUES**

3 credits.

An interdisciplinary approach to our complex and often contradictory relationships with non-human animals, including information about the nature, needs and behavior of human and non-human animals in relation to our personal and professional interactions with them.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/ENTOM/M M & I/PATH-BIO 350 – PARASITOLOGY**

3 credits.

The biology of water-borne, food-borne, soil-borne and vector-borne parasites of animals including humans. Parasites are explored in the context of transmission, associated disease, diagnosis and treatment options, and environmental, cultural and socioeconomic drivers of disease epidemiology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152 or ZOOLOGY 153, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/ENVIR ST/F&W ECOL 360 – EXTINCTION OF SPECIES**

3 credits.

A comprehensive treatment of the ecology, causes, and consequences of species extinction. Ecology and problems of individual species, habitat alteration and degradation, socio-economic pressures and conservation techniques and strategies.

**Requisites:** Sophomore standing and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BOTANY/BIOLOGY/BOTANY 130, or (BIOCORE 381 and 382)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/ENTOM 371 – MEDICAL ENTOMOLOGY**

3 credits.

Arthropods of medical and veterinary importance, how they affect their hosts and transmit diseases.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, ZOOLOGY 153, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

**ZOOLOGY 400 – TOPICS IN BIOLOGY**

1-3 credits.

Various intermediate level topics in Biology. Each section will explore a different topic in biology.

**Requisites:** Sophomore standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 405 – INTRODUCTION TO MUSEUM STUDIES IN THE NATURAL SCIENCES**

2-3 credits.

Provides an overview of natural history museums, including history, field collecting, specimen preparation, collection preservation, ethics, education and employment opportunities. Introduces the natural science museums and library collections located on the UW campus.

**Requisites:** Junior standing

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/ANTHRO/BOTANY 410 – EVOLUTIONARY BIOLOGY**

3 credits.

Evolutionary biology, emphasizing how modern scientists study evolution. Topics include: nature and mechanisms of microevolution, macroevolution, adaptation, speciation; systematics and taxonomy; quantitative genetics and measurement of natural selection; phylogenetic analyses of behavior, physiology, morphology, biochemistry; current controversies in evolution.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BOTANY/BIOLOGY/BOTANY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOCORE 381, (ANTHRO 105 and satisfied QR-A requirement), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 415 – GENETICS OF HUMAN HISTORY**

3 credits.

Covers a range of topics related to human genetics and evolution. Explores questions about what genetic differences between humans tell us about our species' evolutionary and demographic history, and conversely, how our history has shaped the genetic diversity of people living today. At a time of rapidly increasing ability to sequence huge numbers of genomes such questions play a central role in understanding how genetics impacts individuals' disease risks, how to interpret reported ancestry and family history from direct-to-consumer genotyping kits, and how genetics can (or importantly, cannot) inform descriptions of human diversity and concepts of race. Includes topics of diversity and inclusion in genomics studies, with a focus on the application and limits of results obtained from one group to our understanding of other groups.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 425 – BEHAVIORAL ECOLOGY**

3 credits.

Explore how organisms make decisions and how these decisions affect their survival. These decisions are key aspects of an organism's life, e.g. foraging behavior, mating behavior, anti-predator behavior, and habitat selection. Approaches these questions with the perspective that understanding the proximal and ultimate basis of behavior requires understanding the ecological and evolutionary context of behavior.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and BIOLOGY/BOTANY/BIOLOGY 130), or (BIOCORE 381 and 382)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ZOOLOGY 430 – COMPARATIVE ANATOMY OF VERTEBRATES**

5 credits.

Basic vertebrate anatomical systems and a consideration of variations, using functional embryological and evolutionary approaches. Lab dissection and study of representative vertebrate material.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/BOTANY 450 – MIDWESTERN ECOLOGICAL ISSUES: A CASE STUDY APPROACH**

2 credits.

How ecological principles can be used to address contemporary environmental issues such as water quality, invasive species, and population growth. Emphasis on midwestern issues, practical approaches, the role of history, and geographic context.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, BIOLOGY/BOTANY/BIOLOGY 130, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and BIOLOGY/ZOOLOGY/BIOLOGY 102), or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Summer 2022

**ZOOLOGY/BOTANY/F&W ECOL 460 – GENERAL ECOLOGY**

4 credits.

Ecology of individual organisms, populations, communities, ecosystems, landscapes, and the biosphere. The interaction of organisms with each other and their physical environment. These relationships are studied, often in quantitative terms, in both field and laboratory settings.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOCORE 381, or BIOLOGY/BOTANY/BIOLOGY 130, or graduate/professional standing

**Course Designation:** Gen Ed – Quantitative Reasoning Part B

Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 470 – INTRODUCTION TO ANIMAL DEVELOPMENT**

3 credits.

Introduction to the major features and mechanisms of early embryonic development in animals, including (1) the major stages of early development, (2) how form arises in the embryo (morphogenesis), (3) how differences arise between cells in the embryo, and (4) how specific genes control these processes.

**Requisites:** BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOCORE 381, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/BOTANY/ENTOM 473 – PLANT-INSECT INTERACTIONS**

3 credits.

Multiple ways in which arthropods exploit plants, plant traits that deter or augment insects, environmental mediation of these interactions, effects on population dynamics, community ecology and co-evolution, and implications to natural resource management, environmental quality, and sustainable development.

**Requisites:** ZOOLOGY/BOTANY/F&W ECOL/BOTANY/ZOOLOGY 460, ENTOM/F&W ECOL/ENTOM 500, PL PATH/BOTANY/ENTOM/BOTANY/PL PATH 505, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ZOOLOGY 500 – UNDERGRADUATE NEUROBIOLOGY SEMINAR**

1 credit.

A wide range of topics in neurobiology research from molecular neurobiology to integrative systems. Topics discussed by invited UW-Madison faculty researchers might include: ion channels and synaptic plasticity, neural development, sensory and cognitive physiology, biological basis of behavioral disorders and cognitive decline.

**Requisites:** Declared in Neurobiology and PSYCH/ZOOLOGY/PSYCH 523 or concurrent enrollment.

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 504 – MODELING ANIMAL LANDSCAPES**

3-5 credits.

Use computer and Geographic Information System (GIS)-based modeling to explore how climate, topography, vegetation type, and key animal properties all interact to specify from first principles the energetics and activity constraints of animals on any landscape. Links individual, population and community variables at landscape scales.

**Requisites:** Junior standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

Honors – Accelerated Honors (!)

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ZOOLOGY/ENVIR ST 510 – ECOLOGY OF FISHES**

3 credits.

Interactions of fishes with their physical, chemical, and biotic environment; physiological ecology, community ecology and fisheries sciences. Lake Mendota perch fishery and Shedd Aquarium field trips.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/ENVIR ST 511 – ECOLOGY OF FISHES LAB**

2 credits.

Anatomy and taxonomy of Wisconsin fishes and projects in fish ecology.

**Requisites:** ZOOLOGY/ENVIR ST 510 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/AN SCI/F&W ECOL 520 – ORNITHOLOGY**

3 credits.

Introduction to bird biology, ecology, and behavior. Topics include the evolutionary origin of birds and flight, anatomy and physiology, functional morphology, migration, communication, reproductive strategies, ecological adaptations and roles, and biogeographical patterns.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/AN SCI/F&W ECOL 521 – BIRDS OF SOUTHERN WISCONSIN**

3 credits.

Outdoor and indoor labs/lectures emphasizing identification of southern Wisconsin birds by sight and vocalization. Two required Saturday field trips in Southern Wisconsin.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/PSYCH 523 – NEUROBIOLOGY**

3 credits.

Basic mechanisms in cellular neurophysiology: electrophysiology and chemistry of nerve signals, mechanisms in integration, simple nervous pathways and their behavioral correlates.

**Requisites:** (BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOLOGY/ZOOLOGY/BIOLOGY 101, or BIOCORE 485) and (CHEM 104, CHEM 109, or CHEM 116)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY 525 – TROPICAL HERPETOLOGY**

1 credit.

Introduction to perhaps the least known but most threatened groups of tropical vertebrates, the amphibians and reptiles ("herps"). Focuses on the range of tropical habitats and the amphibians and reptiles to be found there, using the current extinction crisis among these animals as an underlying theme.

**Requisites:** (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102) or BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152

**Course Designation:** Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ZOOLOGY/ENTOM 540 – THEORETICAL ECOLOGY**

3 credits.

Introduction to theoretical ecology, including hands-on experience in computer modeling.

**Requisites:** FW ECOL/HORT/STAT/F&W ECOL/HORT 571

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ZOOLOGY/GEOSCI 541 – PALEOBIOLOGY**

3 credits.

The evolutionary process as interpreted from the fossil record. Topics include: the study of form; tempo and mode of evolution; levels and mechanisms of evolutionary change; extinction in the fossil record; trends and patterns in the history of life; macroevolution.

**Requisites:** GEOSCI 304, BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2016

**ZOOLOGY/GEOSCI 542 – INVERTEBRATE PALEONTOLOGY**

3 credits.

The evolutionary history, morphology, and ecology of fossil invertebrates. Labs emphasize fossil identification and recognition of basic morphological features.

**Requisites:** (GEOSCI 110 or 204), (BIOLOGY/ZOOLOGY/BIOLOGY 101 and 102), BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 152, (BIOCORE 381 and 382), or graduate/professional standing.

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2014

**ZOOLOGY 555 – LABORATORY IN DEVELOPMENTAL BIOLOGY**

3 credits.

Developmental anatomy and laboratory manipulations of representative animal embryos used extensively for analysis of developmental phenomena (sea urchins, amphibia, annelids, molluscs, ascidians, insects, chicks, fish, mice).

**Requisites:** ZOOLOGY 470, 625, PSYCH/ZOOLOGY/PSYCH 523, or BIOCORE 587 (or NTP 523 prior to Fall 2017)

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022



### ZOOLOGY/F&W ECOL/LAND ARC 565 – PRINCIPLES OF LANDSCAPE ECOLOGY

2 credits.

Emphasizes the importance of spatial patterns at broad scales. Concepts and applications are covered.

**Requisites:** (BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460 or F&W ECOL 550) and (STAT 301, 371, or STAT/FW ECOL/HORT/F&W ECOL/STAT 571), or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2019

### ZOOLOGY 570 – CELL BIOLOGY

3 credits.

Comprehensive course on modern aspects of cell biology.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 383

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Intermediate

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ZOOLOGY 603 – ENDOCRINOLOGY

3-4 credits.

An introduction to the role that hormones play in a variety of physiological processes and behaviors from a molecular to a systems level. Topics include hormonal involvement in growth, development, homeostasis, reproduction, and behavior, with an emphasis on vertebrate systems.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383 or graduate/professional standing

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

### ZOOLOGY 604 – COMPUTER-BASED GENE AND DISEASE/ DISORDER RESEARCH LAB

2 credits.

Learn to navigate open access biological and biomedical databases that include a wealth of information regarding genes, gene expression, gene pathways, behavioral characteristics, and disorders or diseases. This includes extracting information to develop new ideas, and using multiple databases to develop new ideas on which genes may be playing important, but previously underappreciated or unknown roles.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 381, or graduate/professional standing

**Course Designation:** Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

Grad 50% – Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2021

### ZOOLOGY 611 – COMPARATIVE AND EVOLUTIONARY PHYSIOLOGY

3 credits.

Examines general physiological principles by comparing taxa from diverse evolutionary histories and ecological adaptations. Examples include adaptation to environments differing in salinity, temperature, altitude, pressure, or pollution, and examines how nervous and endocrine systems evolved to support the adaptations.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/BIOLOGY 130, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, or BIOCORE 381

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

### ZOOLOGY 612 – COMPARATIVE PHYSIOLOGY LABORATORY

2 credits.

Investigating physiological adaptations in different animals. Design and execute experiments.

**Requisites:** ZOOLOGY 611 or concurrent enrollment

**Course Designation:** Breadth – Biological Sci. Counts toward the Natural Sci req

Level – Advanced

L&S Credit – Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/NEURODPT/NTP 616 – LAB COURSE IN NEUROBIOLOGY AND BEHAVIOR**

4 credits.

Independent experimental modules exploring neurophysiology and behavior will be completed in groups. Learn techniques and develop investigations into three separate areas of neurobiology.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 and PSYCH 454

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2017

**ZOOLOGY/ANTHRO/NTP/PSYCH 619 – BIOLOGY OF MIND**

3 credits.

Origins and structures of mind, brain, and consciousness. Transitions from early mammalian through primate to hominid intelligence. Genetics and plasticity in brain development. Modern studies of human brain mechanisms and consciousness.

**Requisites:** Junior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Fall 2018

**ZOOLOGY/NTP 620 – NEUROETHOLOGY SEMINAR**

2 credits.

A group discussion of primary literature articles relevant to the neural basis of behavior with a purpose to understand the neural basis of behavior in animals, to learn to read papers critically and improve discussion leading skills.

**Requisites:** ZOOLOGY/PSYCH/ZOOLOGY 523 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY/ENTOM/GENETICS 624 – MOLECULAR ECOLOGY**

3 credits.

Basic principles of molecular ecology. Lecture topics include population genetics, molecular phylogenetics, rates and patterns of evolution, genome evolution, and molecular ecology.

**Requisites:** GENETICS 466, 467, BIOCORE 383, or graduate student standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Intermediate

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 625 – DEVELOPMENT OF THE NERVOUS SYSTEM**

2 credits.

Survey of the principles guiding neuronal development. Covers descriptive and experimental analyses of developmental mechanisms underlying the formation of both vertebrate and invertebrate nervous systems.

**Requisites:** PSYCH/ZOOLOGY/PSYCH 523 or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2018

**ZOOLOGY/BIOCHEM/PHMCOL-M 630 – CELLULAR SIGNAL TRANSDUCTION MECHANISMS**

3 credits.

Comprehensive coverage of human hormones, growth factors and other mediators; emphasis on hormone action and biosynthesis, cell biology of hormone-producing cells.

**Requisites:** (BIOCHEM 501 or 507) and (BIOCORE 383, BIOLOGY/ZOOLOGY/BIOLOGY 101, or ZOOLOGY 570) or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ZOOLOGY/BOTANY/ENVIR ST/F&W ECOL 651 – CONSERVATION BIOLOGY**

3 credits.

Application of ecological principles and human dimensions to the conservation of biological diversity. Topics: biodiversity science; conservation planning; population ecology; habitat loss, species exploitation, invasive species, pollution; human attitudes and activities as they affect the biosphere; approaches to monitoring interventions.

**Requisites:** Satisfied Quantitative Reasoning (QR) A requirement and BOTANY/ZOOLOGY/BOTANY 450, BOTANY/F&W ECOL/BOTANY 455, BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Gen Ed - Quantitative Reasoning Part B

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY 655 – MODELING NEURODEVELOPMENTAL DISEASE**

3 credits.

Systematically explores current animal models of human diseases that affect the central nervous system. Topics will include birth defects that disrupt normal brain architecture (holoprosencephaly and neural tube closure defects), birth defects affecting the visual system, and postnatal disease, e.g. neurodegeneration and stroke.

**Requisites:** GENETICS 466, PSYCH/ZOOLOGY/PSYCH 523, ZOOLOGY 470, or 570

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/F&W ECOL 660 – CLIMATE CHANGE ECOLOGY**

3 credits.

The evidence that the Earth's climate is changing at unprecedented rates is now overwhelming. Environmental tipping points are being crossed and many species are adapting or failing to adapt. Climate change poses a significant problem for conserving and managing wildlife and their habitats. Climate change and its ecological impacts will be discussed and analyzed.

**Requisites:** (Declared in Forest Science or Wildlife Ecology and Junior standing), BOTANY/FW ECOL/ZOOLOGY/BOTANY/F&W ECOL 460, or graduate/professional standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/BOTANY/F&W ECOL 672 – HISTORICAL ECOLOGY**

2 credits.

Study the importance of past events for current ecosystems. Emphasizes concepts and applications.

**Requisites:** Senior standing

**Course Designation:** Breadth - Biological Sci. Counts toward the Natural Sci req

Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ZOOLOGY/NEURODPT/PSYCH 674 – BEHAVIORAL NEUROENDOCRINOLOGY SEMINAR**

2 credits.

Behavior results from a complex interplay among hormones, the brain, and environmental factors. Behaviors and their underlying neural substrates have evolved in response to specific environmental conditions, resulting in vast species diversity in behavioral and neuroendocrine solutions to environmental problems. Designed to explore the primary literature on the neuroendocrine underpinnings of behavior spanning from feeding to sex differences in complex social behaviors. A range of taxonomic groups will be discussed, including (but not limited to) mammals, birds, and fish.

**Requisites:** BIOLOGY/ZOOLOGY/BIOLOGY 101, BIOLOGY/BOTANY/ZOOLOGY/BIOLOGY/BOTANY 151, BIOCORE 383 or graduate/professional standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2021

**ZOOLOGY 677 – INTERNSHIP IN ECOLOGY**

2 credits.

Provides support and structure for those interested in gaining hands-on experience working as a volunteer with local environmental, ecological or conservation groups.

**Requisites:** Junior standing

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 681 – SENIOR HONORS THESIS**

1-6 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 682 – SENIOR HONORS THESIS**

1-4 credits.

Mentored individual research and study for students completing a thesis in an Honors program.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

Honors - Honors Only Courses (H)

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 691 – SENIOR THESIS**

1-6 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ZOOLOGY 692 – SENIOR THESIS**

1-4 credits.

Mentored individual research and study for students completing a senior thesis.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 698 – DIRECTED STUDY**

1-6 credits.

Selected research projects for juniors and seniors.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 699 – DIRECTED STUDIES IN ZOOLOGY**

1-6 credits.

Selected research projects for juniors and seniors.

**Requisites:** Consent of instructor

**Course Designation:** Level - Advanced

L&S Credit - Counts as Liberal Arts and Science credit in L&S

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY/BOTANY 725 – ECOSYSTEM CONCEPTS**

3 credits.

Scope and objectives of ecosystem ecology; roles of theory, long-term studies, comparative studies, and large-scale experiments; scaling problems; ecosystem services and ecological economics; adaptive ecosystem assessment and management.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY/ATM OCN/ENVIR ST/GEOSCI 750 – PROBLEMS IN OCEANOGRAPHY**

3 credits.

Introduction to techniques used in the study of the biology, chemistry, geology, and physics of the marine environment.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/NEURODPT/NTP 765 – DEVELOPMENTAL NEUROSCIENCE**

3 credits.

Analysis of neural development with emphasis on experimental approaches. Combination of lectures and discussions of primary literature. Topics include neural induction, patterning, mechanisms of axon guidance, neural crest cell migration and differentiation, cortical development, and synapse formation and elimination.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2023

**ZOOLOGY 799 – INDEPENDENT STUDY**

1-6 credits.

Advanced topics in zoology explored through individual research projects.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2021

**ZOOLOGY 800 – ADVANCED TOPICS IN THE BIOLOGICAL SCIENCES**

1-3 credits.

Various advanced topics in the Biological Sciences

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY/BOTANY/ENTOM/GENETICS 820 – FOUNDATIONS OF EVOLUTION**

2 credits.

Explore some of the most important themes and debates that have permeated evolutionary biology over the last 50 years. Read key papers related to each controversial topic, debate the pros and cons of competing viewpoints, and reflect on the relevance of the issue to contemporary evolutionary biology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/BOTANY/F&W ECOL 879 – ADVANCED LANDSCAPE ECOLOGY**

3 credits.

Emphasizes spatial patterning (its development and importance for ecological processes) and often focuses on large regions. Learn concepts, methods, and applications of landscape ecology.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Spring 2022

**ZOOLOGY/ATM OCN/BOTANY/CIV ENGR/ENVIR ST/GEOSCI 911 – LIMNOLOGY AND MARINE SCIENCE SEMINAR**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY/AGRONOMY/ATM OCN/BOTANY/ENTOM/ENVIR ST/F&W ECOL/GEOG 953 – INTRODUCTION TO ECOLOGY RESEARCH AT UW-MADISON**

1-2 credits.

Introduces new graduate students to the diversity of ecologists across the UW-Madison campus. Includes discussions of key topics in professional development, research presentations by faculty members, and discussions of assigned papers with senior graduate students.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** No

**Last Taught:** Fall 2022

**ZOOLOGY/AN SCI/OBS&GYN 954 – SEMINAR IN ENDOCRINOLOGY-REPRODUCTIVE PHYSIOLOGY**

0-1 credits.

Promotes scientific and professional development. Presenters develop and deliver research presentations to a scientific audience, field questions, and receive critiques about their presentation style and scientific approach. Additional presentations include professional development, career advancement opportunities, and topics of interest to the endocrinology and reproduction community at large.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 955 – SEMINAR-LIMNOLOGY**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 956 – SEMINAR-ECOLOGY**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2022

**ZOOLOGY 957 – SEMINAR-EVOLUTION**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 958 – SEMINAR-BIOPHYSICAL AND PHYSIOLOGICAL ECOLOGY**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2017

**ZOOLOGY 960 – SEMINAR IN CELLULAR BIOLOGY**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY 962 – SEMINAR-ETHOLOGY**

1 credit.

Sections in various fields of zoological research.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023

**ZOOLOGY/ATM OCN/BOTANY/ENVIR ST/F&W ECOL/GEOG/  
GEOSCI 980 – EARTH SYSTEM SCIENCE SEMINAR**

1 credit.

Topics in earth system science. Emphasis on the coupling between atmospheric, oceanic and land surface systems, involving physical geochemical and biological processes, and including interactions with human systems.

**Requisites:** Graduate/professional standing

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Fall 2016

**ZOOLOGY 990 – RESEARCH**

1-9 credits.

Advanced research in biology as part of graduate program requirements arranged with mentoring faculty.

**Requisites:** Consent of instructor

**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement

**Repeatable for Credit:** Yes, unlimited number of completions

**Last Taught:** Spring 2023



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